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The Journal of The
SOUTH CAROLINA
Medical Association

Infant Mortality

Richard Wiseman

Cholesterol and Lipids

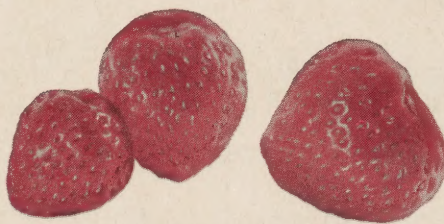
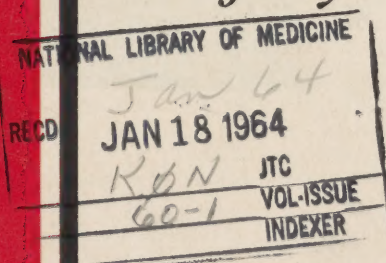
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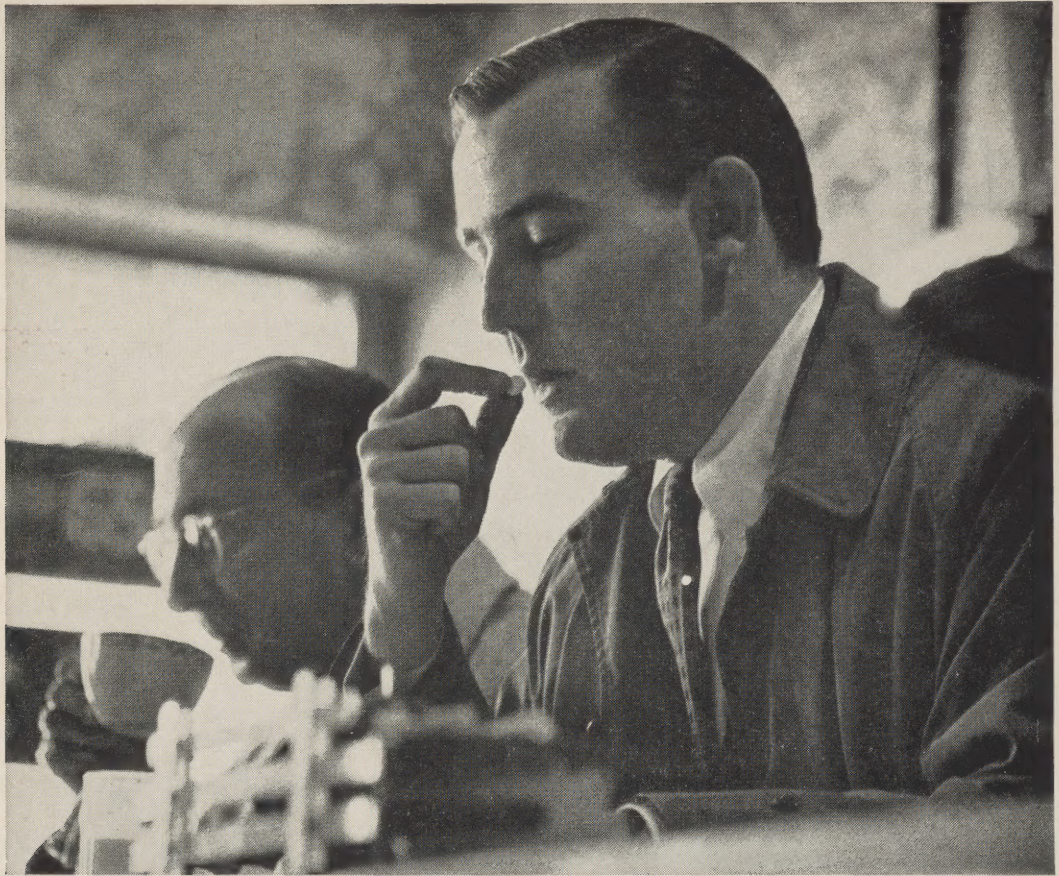
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Current Therap. Res. 3:29, Feb., 1961.

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South Carolina Medical Association, 309 West Evans
Street, Florence, South Carolina. Subscription Price:
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S. C.

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Contributions of Original Articles

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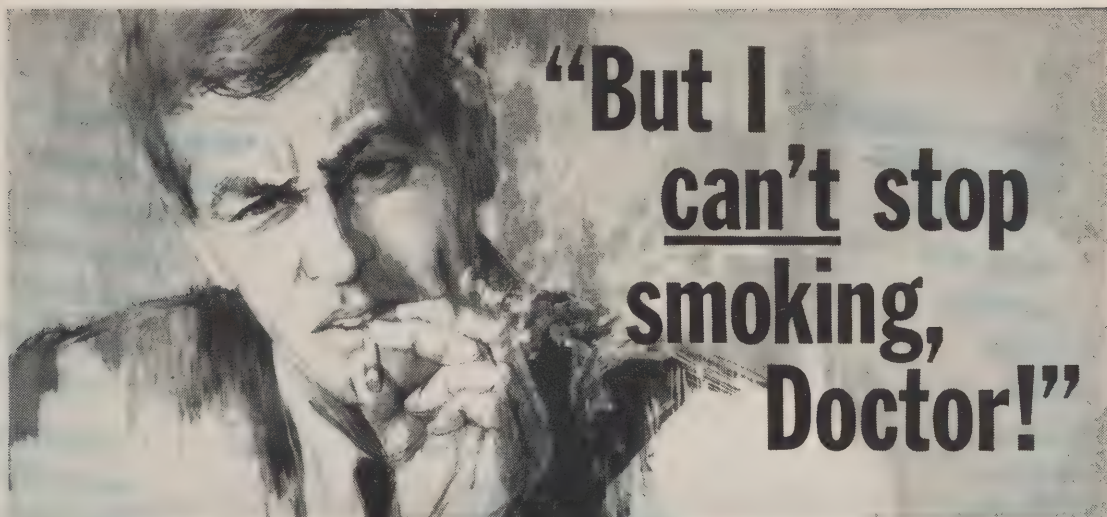
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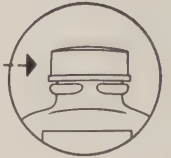
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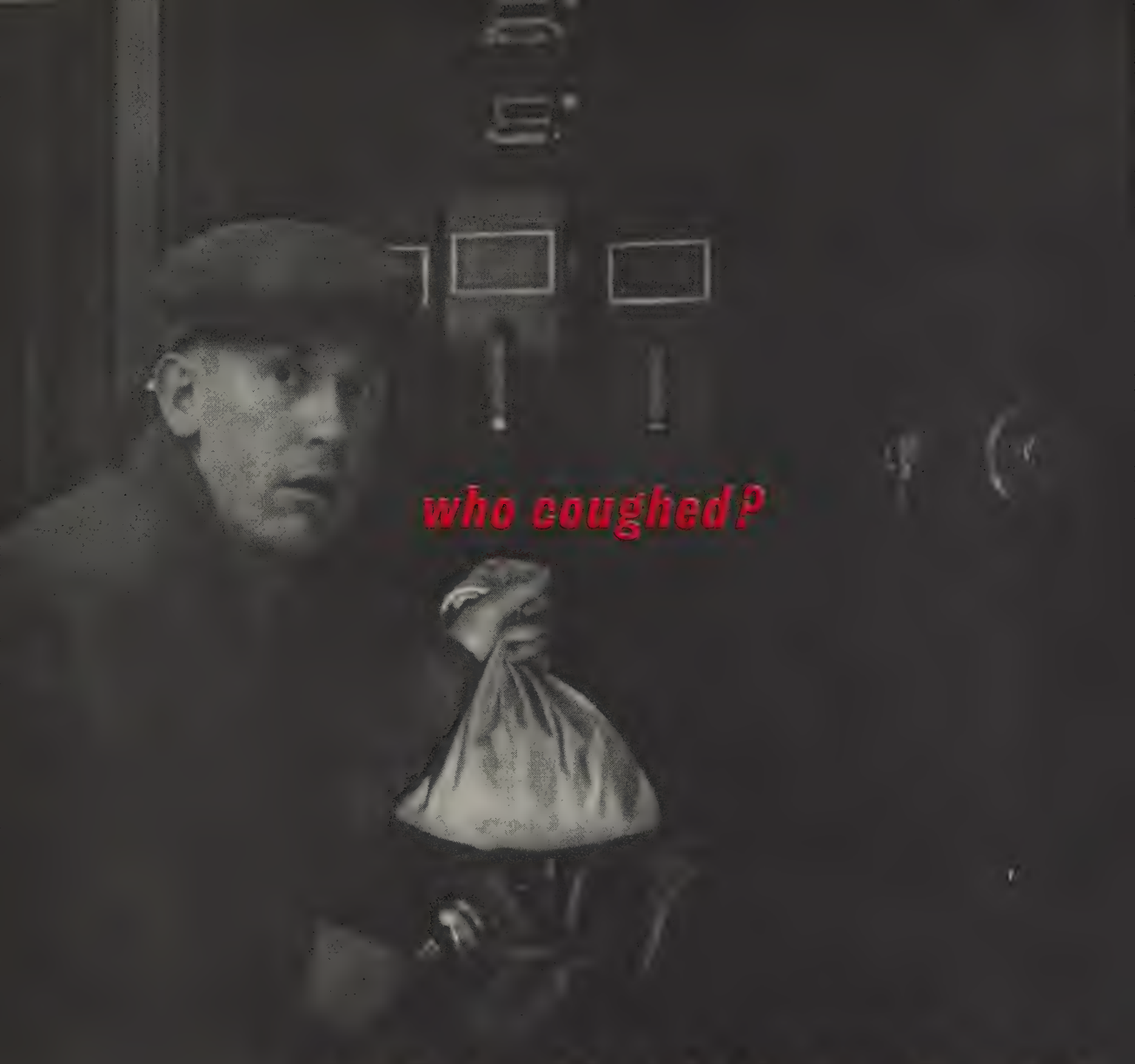
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1. Boland, E. W.: J.A.M.A. 17:835 (Oct. 15) 1960. 2. Black, R. L., et al.: Arthritis and Rheumatism 3:112 (April) 1960.

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CAUTION: Should be used with caution in patients with known idiosyncrasies to phenylephrine HCl and in patients with moderate or severe hypertension, hyperthyroidism or advanced arteriosclerosis. In these patients use should not exceed three days. Hycomine Syrup is generally well tolerated but in some patients drowsiness, dizziness or nausea may occur. May be habit-forming.

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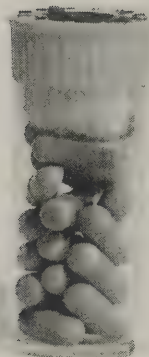
Nicotinic Acid.....100 mg.

(as the sodium salt)

Alcohol.....5%

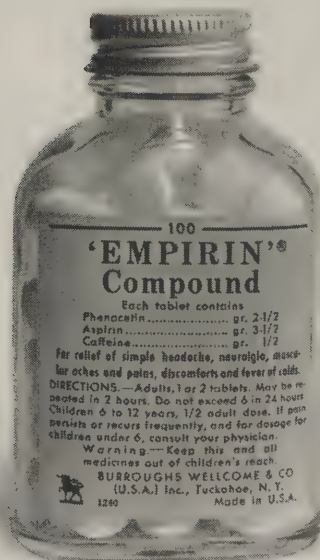
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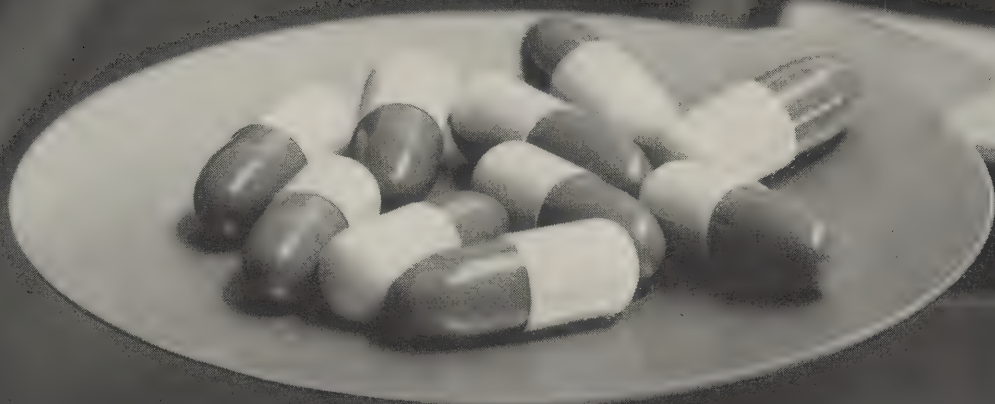
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The Journal

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VOLUME 60

January, 1964

NUMBER 1

INFANT MORTALITY IN SOUTH CAROLINA

E. KENNETH AYCOCK, M. D., F.A.A.P.

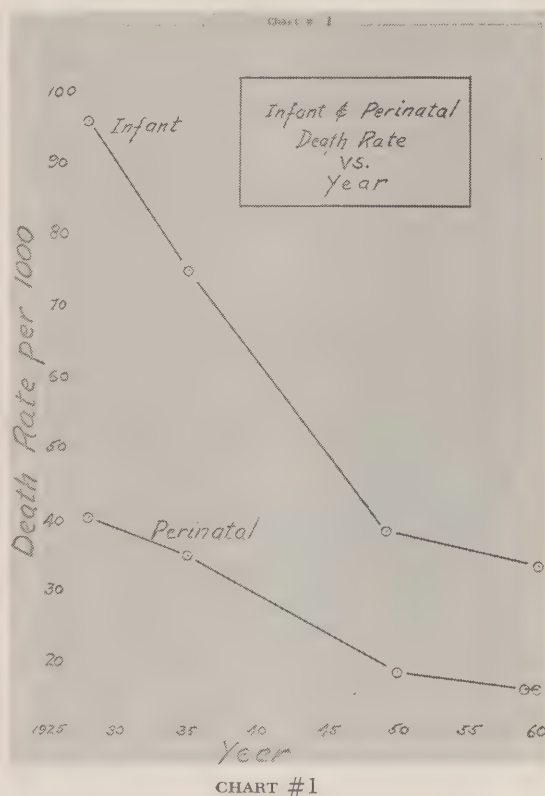
State Board of Health, Columbia, South Carolina

South Carolina has the unfortunate position of ranking fourth highest in infant death rates (total infant deaths per 1,000 live births). Only Mississippi, Alaska and the District of Columbia have a higher infant mortality.

An analysis of infant death rates since 1930 reveals that only one other state has exceeded South Carolina in reducing its total infant death rate, and that South Carolina has reduced its total infant death rate from 88.7 in 1930 to 30.7 in 1962. The greatest decrease in infant deaths from 1930-1950 occurred in the age group of one month to 12 months. There was a corresponding decrease in perinatal deaths for the years 1930-1950, however, this decrease was not as significant as that occurring in older infants (see chart #1) and since 1950 to 1960 the perinatal death rate has dropped only from 18.2 to 16.8. The national average for perinatal death rate is 16.7. In 1960 there were 1,210 infant deaths under 28 days of age to make a death rate of 20.3 as compared to the national average of 18.7.

To account for the high rate of infant mortality in our state a closer analysis shows that South Carolina ranks high due to the increased number of infant deaths between one and twelve months of age. A spread of infant deaths by age groups (see chart #2)

shows the striking increase in colored infant deaths from one to three months as compared to white infant deaths and this disproportioned or alarming increase of colored infant deaths continues throughout the first year of life.



INFANT MORTALITY

CHART #2
INFANT DEATHS BY AGE GROUP
1962

	Total	White	Colored	Hospital- ized	Non Hosp.	Medical Care	Non Medical Care
Birth to 1 hr. of age	83	47	36	73	10	79	4
1 hour to 1 day	395	243	152	356	39	385	10
1 day to 1 week	385	228	157	329	56	366	19
1 week to 1 month	146	54	92	102	34	129	17
1 month to 3 months	298	67	231	125	173	249	49
3 months to 6 months	289	83	206	116	173	237	52
6 months to 9 months	105	26	79	49	56	87	18
9 months to 12 months	77	21	56	42	35	68	9
Total	1,778	769	1,009	1,192	586	1,600	178

Studies on infant mortality (1962) by cause and by age groups (see chart #3) shows that the leading causes of deaths in the age group one to twelve months were as follows: pneumonia 336 (national per cent 8.7 — South Carolina 15.1 per cent); digestive disorders 103 (national per cent 2.2 — South Carolina 5.3 per cent); accidents 92 (national per cent 3.4 — South Carolina 5.3 per cent)*

It is of interest to note that in the leading causes of death in the first week of life South Carolina is lower than the national average with regard to:*

	NATIONAL	SOUTH CAROLINA
Birth injuries	9.3	6.0
Postnatal asphyxia	17.7	11.5
Immaturity (prematurity)	19.0	17.1

A distribution of infant mortality on a county basis shows such marked variation as

shown by the maps with respect to white and colored (chart #4 and 5). Concerning ourselves with the high colored infant death rate we see such alarming infant mortality rates as represented by the following counties.

COUNTY	COLORED INFANT DEATH RATE
Lexington	171.4
Marion	78.4
Saluda	71.0
Marlboro	67.5
Aiken	66.9
Abbeville	64.7
Lee	63.9
Greenwood	61.2
Spartanburg	61.2
Kershaw	60.7
Florence	59.9
Hampton	59.1
Calhoun	58.5
Jasper	57.6
Colleton	57.5
Dillon	51.2
Williamsburg	50.6

CHART #3
INFANT MORTALITY — AGE DISTRIBUTION

CAUSE	AGE UNDER 7 DAYS	AGE 7 DAYS TO 28 DAYS	AGE OVER 28 DAYS TO ONE YEAR
Prematurity	271	15	8
Postnatal asphyxia and atelectasis	213	10	3
Pneumonia of newborn	32	33	1
Birth injuries	96	3	
Congenital malformations	84	26	50
Ill defined diseases peculiar to infancy	78	3	5
Infections of newborn	20	17	
Hemolytic diseases	22	4	31
Pneumonia and diseases of lung		9	336
Digestive disorders	9	2	103
Accidents	4	9	92
Ill defined diseases	26	8	83
Contagious diseases		4	29
Others	6	5	28
TOTALS	861	148	769

*National and state averages computed on 1960 statistics.

INFANT MORTALITY



CHART #4
1962 Infant Death Rate by County. White.
Shaded areas represent areas with death rate over national rate. 22.4.

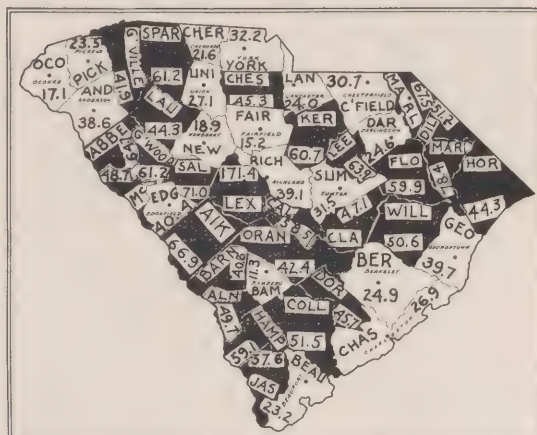


CHART #5
1962 Infant Death Rate by County. Non-White.
Shaded areas represent areas with death rate over national rate. 40.7.

Such factors as maternity care, midwife deliveries and prematurity immediately come into consideration in regard to infant deaths. These factors, however, cannot alone account for South Carolina's high infant mortality rate, for a study shows that our high incidence is due to the death of infants over 28 days old. In 1962 only 13% of deliveries were performed by "granny" midwives. Only 6% of all infant births were premature and only 6.4% of the total premature babies died during infancy. The national mortality rate of prematures is 6.6%.

From this study of infant mortality it would seem apparent that the chief causes of infant

mortality — pneumonia, gastrointestinal disease, and accidents — are directly related to (1) race — higher in colored, (2) population distribution — namely, counties with higher percentage of colored population (chart #6) with the exception of the following counties: Bamberg, Beaufort, Berkeley, Charleston, (3) socio-economic status and illiteracy (chart #7), and (4) density of population; i. e. the infant death rate is higher in the less populated counties.

Other factors more difficult to evaluate but which show a definite relationship to increased infant mortality are:

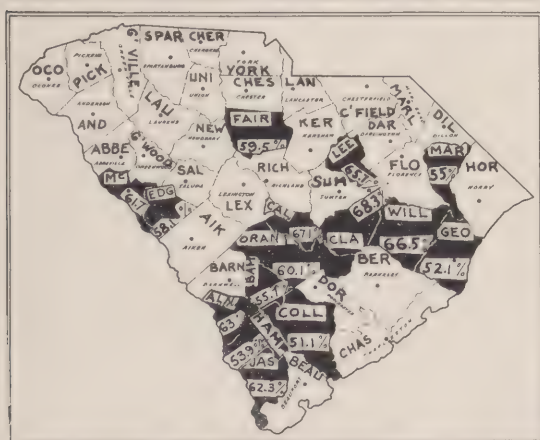


CHART #6
50% or more Non-White population.

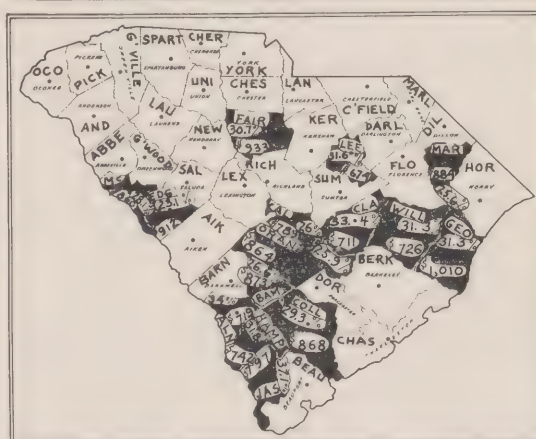


CHART #7
Functional illiteracy. 25 and over.
Average per capita income, 1960.

(1) Greater number of "teenage" marriages in the Southeast

Studies have shown that there is increased infant mortality rates among mothers under 20 years. This manifests itself not only by the increased incidence of premature births among teenage mothers, but also by the increased incidence of infant deaths in the post-neonatal period. There is also a close correlation between "teenage" parent-age and low socio-economic level. The maturity of the mother's judgment generally parallels the mother's age.

(2) High ratio of unwed mothers per 1,000 live births (South Carolina 120.8 as compared to national 56.9)

Higher rates of unwed mothers per 1,000 live births. South Carolina has a rate of 120.8 illegitimate births to the national average of 56.9. The rate of illegitimacy also increases with the decline in socio-economic status. The quality of child care is generally poorer in the home of the unwed mother.

(3) Position of child in family

The position of an infant in the family has a direct bearing or is thought to have, upon his likelihood of survival. The larger the number of older siblings, the greater is his chance of contracting an infectious disease from them. Also, the larger the family, the greater are the responsibilities of the mother, thus limiting her ability to administer adequate child care and to guard against accident hazards.

(4) Inadequacy of child care.

In 1959 there was a national average of 128.6 physicians per 100,000 population, whereas in South Carolina there were 77.7 physicians per 100,000 population. Another disarming factor is that the Southeast with 12.1% of the nation's children has only 9% of the nation's pediatricians. (Chart #8 shows the number of physicians in private

practice per county and also the rate of physicians per 10,000 population for 1960.

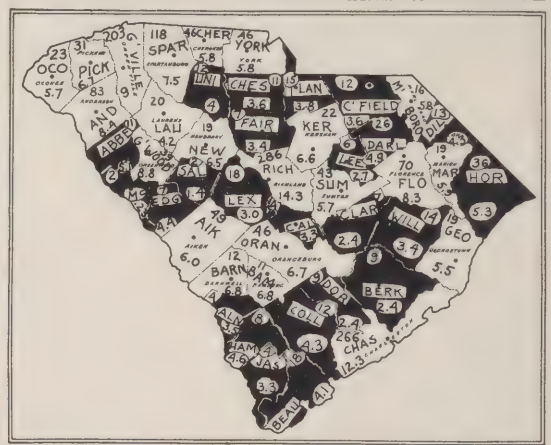


CHART #8

Physicians and Surgeons in Private Practice in S. C.

No. above county: No. of physicians in county.

No. below county: rate per 10,000 pop.

Shaded area: Counties with below S. C. average.

Public health supervision of many infants and children in South Carolina is lacking and this is especially true with respect to the preschool child. (Chart #9) gives the number of well child clinics and conferences conducted for the years 1959-1962 and the total number of children seen. Thus generally speaking the public health services are seeing approximately only one out of every nine infants born and only one out of every 50 pre-school children.

Of the total 1,778 infant deaths in 1962, 1,192 infants died at hospitals and 586 died at home. Ten per cent (or 178) of infant deaths occurred without medical attention. The quality and duration of medical care that these infants received we are not able to ascertain, nor can we give specific reasons why these 178 infants died without receiving any medical aid.

Conclusion

(1) South Carolina is fourth highest in the nation in infant mortality.

INFANT MORTALITY

- (2) South Carolina has reduced its infant mortality rate over the past 30 years by 58 per cent.

(3) Forty three and three tenths (43.3%) per cent of all infant deaths occur after one month of age.

(4) Infant death rates in South Carolina are high chiefly due to:
- (a) Negro population

(b) Low economic income

(c) Illiteracy

(d) Lack of adequate medical care and supervision

(5) A large proportion of infant deaths in South Carolina could be prevented.

CHART #9
WELL CHILD CLINICS (MEDICAL) 1962

	1959-60	1960-61	1961-62
Number of child health clinics conducted	1,044	1,104	1,208
Number of new patients registered	8,105	8,311	7,705
Number of return visits	15,563	15,838	16,570
Patients under 1 year of age	4,432	4,688	4,736
Patients from 1 to 2 years	1,392	1,492	1,220
Patients from 3 to 5 years	2,281	2,131	1,749

WELL CHILD NURSING CONFERENCES

	468	508	724
Number of nursing conferences	468	508	724
Number of new patients registered	2,535	5,094	6,661
Number of return visits	5,512	8,227	5,690
Patients under 1 year of age	1,211	1,579	1,886
Patients from 1 to 2 years	417	1,053	1,417
Patients from 3 to 5 years	957	2,462	3,358

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Effect of local anesthetics on the cardiovascular system of the dog. D. M. Stewart, W. P. Rogers, J. E. Mahaffey, S. Witherspoon, E. F. Woods (Charleston) Anesthesiology 24:620-624, Sept.-Oct. 1963.

The acute systemic toxic effects of an overdose of local anesthetic are manifested by (1) excitement or convulsions, (2) unconsciousness, (3) respiratory depression, and/or (4) cardiovascular depression, not necessarily in this order. The first three toxic manifestations may very well be life threatening by compromising adequate ventilation. However, these detrimental effects may be readily reversed by establishing effective mechanical ventilation. Cardiovascular depression, however, may be extremely difficult to reverse, especially in the patient with pre-existing cardiovascular disease. A study is presented in this paper utilizing six commonly employed local anesthetics with emphasis on the cardiovascular depressant effects of these drugs. All of the drugs utilized in this study were shown to be capable of producing direct myocardial depression of severe degree, and the relative toxicity was determined on this basis.

Relations between maternal anxiety and obstetric complications, by R. L. McDonald, M. D. Gynther, and A. C. Christakos. (Charleston) Psychosom. Med. 25: 357-363, July-Aug. 1963.

This study was designed to assess the relationship of obstetric complications, total labor times, and mean birth weights to maternal anxiety. For this purpose, the IPAT Anxiety Scale and other tests were administered at the beginning of the third trimester to 86 white patients. Following delivery, each case, without knowledge of the psychometric results, was classified as either normal or abnormal according to the presence or absence of common obstetric complications. There were no significant differences between these groups with regard to age, intelligence, mean gravidity, or numbers of primigravidas. However, the abnormal group obtained significantly higher anxiety scores than the normal group. In addition, the abnormal group utilized intellectual and obsessional defenses in response to threatening situations, such as pregnancy. Significant positive correlations were also obtained between maternal anxiety and both birth weights and labor times.

RICHARD WISEMAN

The Sergeant-Surgeon to Charles II whose Writings
on the Management of Anorectal Diseases were
Influential for Two Centuries*

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This year, when the tercentenary observance of the land grant charter to the Proprietors of Carolina is being commemorated, seems an appropriate time to present a literary flashback of the colorful, but little known, life and writings of Richard Wiseman, Sergeant-Surgeon of Charles II of England. The physician to the King who provided a name for South Carolina's oldest city was the leading British surgeon in his day, a contemporary of Thomas Sydenham, Thomas Willis, and Francis Glisson. His writings on anorectal diseases were influential for 200 years, a significant span of time.

Controversy over the year of Wiseman's birth sparks the interest of his biographers, who ascribe it to three different years. Probably born in London between the years 1621 and 1623, Richard Wiseman was presumably an illegitimate son of Sir Richard Wiseman.⁶ Nothing is known of his early education; however, historians suppose from reading his excellent writings that he received a good one. In 1637, when the youth was about 15 or 16 years old, he was presented to the Barber-Surgeons' Company as an apprentice to Richard Smith. Shortly after completing the apprenticeship, like many other Englishmen, he enlisted in the Dutch Navy. Serving as a professional surgeon at the age of twenty, Wiseman remained in the Dutch service for some years, treating many and varied battle

wounds at sea, and developing his skill and reputation. Wiseman himself thought very highly of his training aboard ship, and later wrote that he learned more from those experiences than from schooling on shore.

However, Wiseman seems to have distinguished himself first as an army surgeon in the English Civil War. After the outbreak of the Wars in 1644, he returned home, joined the Royalist cause, and served with King Charles I in the battles of western England. Lord Hopton, a commanding officer of the Royalist forces, recommended and appointed Wiseman as a surgeon to Charles, then the Prince of Wales. Thereafter, during the prince's flight from England to the Continent, Wiseman became his trusted comrade. Accompanying the royal household as the Crown Prince's personal surgeon, Wiseman was in close attendance during all of Charles' campaigns.

During their defeats and withdrawals, Wiseman suffered the same misadventures as other staunch Royalists. In 1649, at the battle of Worcester, he was taken prisoner and held captive at Chester for two years. Upon his release, he journeyed to London to enroll as a freeman of the Barber-Surgeons' Company, first serving as an assistant to Edward Moline, an established surgeon, and later engaging in a successful private practice. However, London's volatile political climate caused him to be arrested twice. His second

⁶From the Department of Surgery, Medical College of South Carolina.

arrest came in 1654, while he was treating a Royalist prisoner in the Tower of London. Accused of complicity in a plot to free the prisoner, Wiseman was imprisoned but fortunately, he was allowed to resume a limited practice while incarcerated.

After being liberated, he was probably under constant suspicion and surveillance, as were all Royalists. After remaining for some while in London, he joined the Spanish navy, and for three years, he practiced surgery at sea and in the West Indies.

Wiseman returned to England in 1660, as the monarchy was restored, with Charles II on the throne. The new King, remembering their close earlier friendship, appointed Wiseman "Surgeon in Ordinary for the Person."⁷ When the Sergeant Surgeon Humphrey Painter died in 1672, Wiseman was promoted to be Principal Surgeon and Sergeant Surgeon to Charles. It was during his tenure as Sergeant Surgeon that Richard Wiseman established his fame for posterity, by writing his surgical treatises.

Suffering from tuberculosis, which he probably contracted in the West Indies, he spent the last years of his life as an invalid, dying of hemoptysis in 1676.

The position of Sergeant Surgeon is comparable in prestige to our own Surgeon General, but their duties are entirely different. The English official served as the personal surgeon to the royal household. The derivative of "sergeant" is not the military office, but rather the Latin *serviens* ("serving"). Thereby, the Sergeant at Arms served the Speaker of the House of Commons, and the Sergeant Surgeon ministered to the royalty.⁸

In the introduction to his writings entitled "The Epistle to the Reader," Richard Wiseman reveals facets of his personality and establishes the tenor of his writings. Proud of the nobility and dignity of surgery, he feels obliged to write about his knowledge and experiences in order to instruct, and to make learning easy for the young surgeon. His surgical writings are practical and useful. With humility, Wiseman emphasizes that these treatises deal with his own judgment and ex-

periences rather than the opinion of others. In a difficult case, he advises the reader to seek consultation.



RICHARD WISEMAN

This oil on canvas, unsigned portrait of Richard Wiseman hangs in the Royal College of Surgeons' building at Lincoln's Inn Fields, London.*

Wiseman writes of his unsuccessful, as well as his successful, cases and recommends that other surgeons do likewise: "For my part, I have done it faithfully, and thought it no disgrace to let the world see where I failed of success; that those that come after me may learn what to avoid: there being more of instructiveness often in an unfortunate case than in a fortunate one; and more Ingenuity in confessing such Misfortunes which are incident to Mankind, and which have attended all my Bretheren as well as my self; and will attend thee also, Reader, in spite of all thy Care and Diligence, if thou undertake the Employment."¹²

The title page of the first edition, published in 1676, reads: "*Severall Chirurgicall Treatises* by Richard Wiseman, Serjeant-Chirurgeon." In the sixth edition, published in 1734, the title page reads: "*Eight Chirurgical Treatises on these Following Heads: viz. I Of Tumors. II Of Ulcers. III Of Diseases of the Anus. IV Of the King's Evil. V Of Wound. VI Of Gun-shot Wounds. VII Of Fractures and Luxations. VIII Of the Lues Venerea.* By Richard

⁸ Reproduced with permission from A Catalogue of the Portraits and other Paintings, Drawings and Sculpture in the Royal College of England by William LeFanu.

E. & S. Livingstone Ltd. Edinburgh and London, 1960.

Wiseman, Sergeant Chirurgion to King Charles II." There are only relatively minor changes in the last edition. However, the case reports, observations, discussions, and treatment are the same in both editions.

The third book, "*A Treatise of the Diseases of the Anus*," presents the opportunity to consider proctologic knowledge and concepts of the mid-seventeenth century.

Wiseman recognized that external hemorrhoids cause pain and internal hemorrhoids can bleed. Moreover, reflecting the opinions of his times, he wrote of the salutary effect of bleeding from hemorrhoids: "If the Haemorrhoids flow seasonably, and moderately, they purge the Body of feculent gross Blood, and thereby free it of many dangerous Diseases, as Pleurisy, Inflammation of the Lungs and Kidneys, Quartane-Fevers, etc. and restore Health."^{12, 13}

Wiseman wrote of the symptoms of hemorrhoidal disease: bleeding, swelling and distension, and also mentioned the association of hemorrhoids with fistula and with cancer.

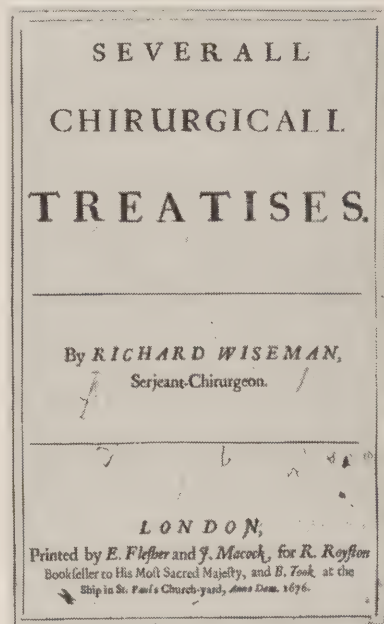
Another anorectal lesion mentioned is procidentia ani. His description of this lesion could be inserted into any modern day treatise on that subject. "The signs are evident to the sight: the inside is turned outward, and the tumour is of a fleshy colour and rugous, by reason of the folds and wrinkles of the Coat; and it is accompanied with an uneasiness, and desire to go to Stool."^{12, 13} He cites five cases of procidentia: one of a month old infant, another of a 4 year old child, a case of a 28 year old man, a woman of 40 years, and a person about 60 years of age. This assortment typifies the variety of such cases seen in practice today. Wiseman wrote truly that "the cure of this disease is difficult, but much worse in old people than in young."

His writings include a chapter entitled "Of Condyloma, Ficus, Thymi, etc." which deals with growths of varying types. The "condyloma" and "ficus," as stated by Wiseman, are the same, "differing only in their manner of growth, they both arising from a peculiar kind

of round soft tubercle distending the internal, rugous tunicle of the Anus, without pain or alteration of colour in the skin, and as that increaseth, it groweth fleshy. If it continueth that figure, it is a Condyloma: but if it shoot out with a long neck, as it frequently happens, resembling a fig, it may deservedly be called Ficus."

When he writes of cristae in the form of a Cock's Comb, one may wonder if this is the ulceration and elephantiasis (esthiomene) of modern day lymphogranuloma venereum.

"Thymi" are hard excrescences, like the tops of the thyme plant, and "partake of the nature of Warts." This lesion is currently termed "verucca acuminata," or "anal warts." Fissures about the anal verge are mentioned. Also, "Phyma," or abscess, about the anal orifice is described with 3 case reports.



Title page of the first edition (1676) of the Surgical Treatises by Richard Wiseman. Subsequent editions identify Wiseman as "Serjeant-Chirurgion to King Charles II"; not just "Serjeant-Chirurgion."

Wiseman writes of the difficulties in treating fistulae in ano (and his difficulties are appreciated by the modern surgeon who, likewise, has his share of difficult fistulae to

treat) and writes of laying open the fistula by incision or ligature. The latter method involves the principle of application of a seton. To illustrate the varieties and difficulties in management of fistulae, he presents 14 case reports.

The influence of Richard Wiseman on the management of anorectal diseases is evidenced in the writings of those who followed him. George Calvert, in 1824, wrote "Wiseman, the father of surgery in this country, and whose excellent work contains much information on this subject, speaks of piles by the term varices hemorrhoidales, and states, that they will admit of the following essential differences:" and then quoted verbatim from Wiseman's *Chirurgical Treatises*.³

Writing about stricture of the rectum, Thomas Copeland, in 1824, remarks "that we meet no description of the disease in any author that I can find, before the time of Wiseman," and then proceeds to discuss the case described by Wiseman.⁴

White,¹¹ in 1815, cites the treatment of Wiseman in a case of cancer of the rectum and in a case of rectal stricture.

In their writings on anorectal diseases, Frederick Salmon in 1829,⁸ Alf. A. L. M. Velpeau in 1847,¹⁰ John Howship in 1824,⁵ and

George Bushe in 1837,² mention Richard Wiseman and his concepts.

In 1884, William Bodenhamer¹ of New York, wrote: "The celebrated Wiseman, surgeon to Charles the Second of England, fully and ably discussed and advocated the doctrine that hemorrhoids were varices of hemorrhoidal veins;" and followed this statement by quotations from Wiseman's *Severall Chirurgical Treatises*, 1676.

To have one's writings cited is ordinarily complimentary. But, for one's writings to be referred to as a guide for two hundred years comes as a tribute to very few. Which contemporary medical writings will be used for instruction in the year 2163 provokes philosophical contemplation. Richard Wiseman merits special recognition and admiration from those who treat anorectal disease today because his treatise on diseases of the anus has had instructive value for two centuries.

Summary: In the tercentenary observance of the granting of the charter of Carolina to the Proprietors by Charles II, a literary flashback of the colorful, but little known life of Richard Wiseman has been presented. The Wiseman treatise on anorectal diseases has been reviewed. Some of the nineteenth century books on proctology mentioning Wiseman and his writings have been cited.

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THE INTERRELATIONS BETWEEN CHOLESTEROL AND OTHER LIPIDS. II

A REVIEW.

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OUTLINE OF VARIOUS CLINICAL STATES IN WHICH ABNORMAL CHOLESTEROL VALUES ARE OBSERVED

A. *Those With Clear Serum*

1. Essential or familial hypercholesterolemia, which appears in some families to be transmitted by a dominant gene. Clinical findings include prominent xanthomas of the tendons and skin, early onset of atherosclerosis, and arcus senilis. Serum chemistry shows elevation of cholesterol, phospholipids, with normal or only slightly elevated triglycerides. Reduction of dietary fat to 20% of the total calories is usually necessary along with the use of polyunsaturated fatty acids. Nicotinic acid, MER/29, and some of the thyroid preparations have been effectively employed. If angina or evidence of coronary artery disease is present, the thyroid preparations must be employed with extreme caution.

2. Biliary Cirrhosis—Jaundice and intense pruritis are notably outstanding symptoms in this group, along with darkening of the skin to an unusual degree. Flat xanthomas of the xanthoma planum type, and xanthomas of the oropharyngeal mucosa may be quite prominent. Hepato-splenomegaly is usually evident. Blood chemistry findings show marked elevation in total cholesterol with concomitant elevation of the cholesterol esters, except in the ter-

minal stages where severe liver damage is present. Phospholipids are likewise elevated. The triglyceride fraction is usually normal. In addition, there occurs elevation of the serum bilirubin of the conjugated and unconjugated type, with bilirubinuria and increased bile acids and bile salts in the urine. The serum remains clear because of the elevation of phospholipids concomitant with elevation of cholesterol with proportionate solubility of the lipid fraction. Cholestyramine has proved to be very efficacious in management of these people in regards to clearing of the xanthomas, relief of pruritis, and improvement in their sense of well being. Although bile acid reduction takes place, bilirubinemia does not appear to be improved. Poly-unsaturated fats and MER/29 have also been employed, as well as testosterone for the relief of itching, but this usually increases the degree of jaundice.

3. Myxoedema—The facial and body skin changes, along with general slowing down of activity with diminution of scalp, eyebrow, axillary and pubic hair, the development of eruptive xanthomas, slowing of the relaxation phase of tendon reflexes, and hastening of atherosclerotic processes, are parts of the clinical findings in myxoedema. Blood chemistry studies show moderate elevations of serum cholesterol and phospholipids. The triglycerides are

not increased, and the serum remains clear. Appropriate administration of thyroxine or thyronine preparations is the treatment of choice.

B. *Conditions Where The Serum Is Likely To Be Mildly To Markedly Cloudy Or Milky*

1. Idiopathic hyperlipemia or Burger-Grutz syndrome — Although in some instances this appears to be a familial disease with recessive gene inheritance, cases not related to familial inheritance are not infrequently seen. There is a diminution in lipase activity with very slow clearing of triglyceride with at times very marked increases in the serum lipids, and in children episodic crises with severe abdominal pain, hemolytic episodes, and pancreatitis occurring in these episodes. Hepato-splenomegaly is almost a constant finding, and evidences of pancreatic insufficiency, both as regards digestive enzyme and insulin secretion may occur. In adults crises of pain, pancreatitis and hemolysis may occur, but hepato-splenomegaly is not present. Diabetes is much more apt to be overt in adults secondary to pancreatitis. Xanthomas involving the tendons and eruptive forms are frequently seen in children and adults, and there is early onset of evidence of atherosclerosis. Blood chemistry findings show an elevation of cholesterol, and cholesterol esters. Serum phospholipids may be normal or slightly elevated. Triglycerides are markedly elevated, and the serum ranges between moderately to extremely cloudy, depending upon whether the patient has a crisis or not at the time of examination. Management consists of the administration of heparin with nicotinic acid, low fat diet, and the use of polyunsaturated fatty acids. Pancreatitis and poorly regulated or unregulated diabetes are accompanied by the early and more rapid advance of atherosclerosis. Cholesterol, cholesterol esters are concomitantly elevated unless liver damage is present, along with elevation of phospholipids. In the presence of liver

damage, cholesterol esters and phospholipids may be depressed. Triglycerides are mildly to moderately increased, and in those who develop diabetic acidosis are markedly increased. In this situation also the free fatty acids are increased. An appropriately planned diabetic type diet and insulin are the therapeutic measures to be employed. Adequate amounts of insulin and dextrose are necessary for proper deposition of fat in the normal fat storage areas of the body, as well as removal of neutral fats from the hepatic cells. Likewise, adequate insulin and dextrose are necessary for lowering of non-esterified or free fatty acids in the serum. (In diabetic acidosis the liver is apt to be quite enlarged and very tender.)

2. Von Gierke's Disease—In this situation the patient may be rapidly alternating between periods of hypoglycemia and hyperglycemia with ketosis. Depending upon the type of the disease, other situations may be present such as myocardial insufficiency, renal involvement, etc. Eruptive xanthomas are frequently present. Cholesterol is usually elevated. The esters remain normal or may be slightly elevated. Phospholipids are elevated, and triglycerides are markedly elevated, as well as free fatty acids. The serum may be quite cloudy or only moderately so. Except for the general efforts to control the blood sugar levels due to deficiency in adequate homeostatic mechanisms related to glycogen release from the liver, there is no effective form of treatment for these patients.

3. Nephrotic Syndrome—In addition to the finding of flat xanthomas, the nephrotic is usually suspected on the basis of marked edema, as well as finding of 4+ albuminuria. Atherosclerosis may advance rapidly in these patients. Blood chemistry findings show an elevation of cholesterol. Usually the esters are elevated in normal proportions. Phospholipids and triglyceride are elevated. Serum is usually ob-

viously cloudy. Treatment consists of measures directed towards sustaining or improving renal function, clearing of edema, and in appropriate cases the use of ACTH or adrenal steroids. As serum albumin rises, there is improvement.

4. Portal Cirrhosis—Although biliary cirrhosis is usually thought of when considering hypercholesterolemia, in some cases of portal cirrhosis cloudy serum is encountered. Cholesterol levels in such instances may be normal or only slightly elevated with increase in triglyceride levels. A reduction of cholesterol esters and phospholipids along with hypoalbuminuria results in marked cloudiness of the serum despite the fact that total lipids may be only very mildly elevated. Therapy consists of appropriate measures for treatment of portal cirrhosis with proper and adequate diet, especially adequate protein. With elevation of the serum albumin levels, clearing of the hyperlipemia occurs with lowering of triglycerides.

5. Cobalt Intoxication—Cobalt has been observed to produce goiter and hypothyroidism. There are recent reports to indicate that for some reason as yet not explained, elevation of cholesterol, cholesterol esters, and triglycerides occurs, in contradistinction to myxoedema where the triglycerides are not significantly elevated. Phospholipids remain normal or somewhat decreased with considerable clouding of the serum in these cases. Stopping the cobalt appears to result in prompt alleviation of the hyperlipemia, and these effects occur prior to improvement in thyroid function, which may be somewhat delayed as regards rise in depressed serum protein-bound iodine fraction, or radioactive I-131 uptake.

6. Other xanthomatous states — xanthelasma may occur without any evidence of hyperlipemia or hypercholesterolemia. The lesions are usually limited in number, and are treated if necessary for cosmetic

or other reasons by local measures. When present as lesions associated with states in which hyperlipemia or hypercholesterolemia are observed, they will respond as do the other xanthomas to correction of the hyperlipemia.

Juvenile xanthogranuloma and xanthoma disseminatum are diseases where xanthomatous skin lesions are prominent, where the serum is clear, and there is no elevation of the lipid or cholesterol fractions. In xanthoma disseminatum analysis of tissue specimens indicates that there may be elevation of some of the cerebroside, and that histiocytes may contain quantities of these lipid substances. Serum values are not reported as being elevated. The involvement of the mucosa to a very marked degree by xanthomas as in biliary cirrhosis in lesser degree, is often a striking finding. There is no known treatment for these.

C. *States Where Cholesterol Is Low and Where Beta-Lipoproteins Are Low*

1. Starvation
2. Leukemia

3. Acanthocytosis—A disease of childhood. Anemia is prominent. Diarrhea, malnutrition, weight loss and fatty stools which look like sprue. The RBC show an exaggerated crenation appearance and the anemic has a hemolytic component.

D. *The Atherosclerotic Problem*—Numerous and voluminous reports of investigations and studies have been carried on actively by many investigators throughout the world as a result of data arising from the experience of the British, Danish, and Norwegian populations in World War II with dietary restrictions incident to the rigors of war. Although the subsequent reduction in the frequency of myocardial infarctions seemed to be attributable to decrease in dietary fat content, completely satisfactory understanding of all the facets of the problem of atherosclerosis and its possible relation to dietary fat content still remains unsettled as regards scientific

validity in all details, particularly as it relates to ultimate etiology.

Specifically, there are variations in data as they relate to coronary atherosclerosis, and data as they relate to atherosclerosis in other arterial systems such as the aorta, carotids, peripheral, and visceral blood supply. More correlation of the relation to the coronary arterial lesions and to the other lesions of the peripheral vascular structures is needed. Hypertension, heredity, unaccustomed stress, obesity, endocrine hormone balance, trauma, infection, aging factors, alcohol, tobacco, hepatic function, infection, and environmental influences all seem to have some possible degree of relationship in the overall problem. There appears to be some doubt in respect to serum lipids as to whether the cholesterol levels *per se* or the lipid fractions, and particularly the triglyceride fractions, may not be more significantly involved, if not in initial pathogenesis, at least with acceleration of the lesions. In animal experiments various food factors and trace metals have been demonstrably implicated by species. This area remains entirely moot in human studies. There is ample evidence that, as in other tissues of the body, cholesterol and other lipid synthesis may occur in vascular structures. The percentage composition of lipids found in atherosclerotic plaques and lesions does not appear to be directly related to the serum values for these substances. In diabetes, familial hyperlipemia, familial hypercholesterolemia, and perhaps in the nephrotic syndrome, acceleration of the atherosclerotic processes perhaps may be directly related to elevation of the blood lipids, but whether a decrease in vascular deposits of these lipids when established is provably diminished with control of the hyperlipemia remains disputable. There is some evidence to suggest that it does; on the other hand, in some studies where careful pathological and analytical measurements were made,

and where it was observed that decreases in blood lipids, body weight, and blood pressure may or may not have occurred, no conclusive evidence of diminution of vascular atherosclerosis could be demonstrated, or reduction in vascular lipid content in these lesions. Insofar as regression of tendon or skin xanthomatous deposits is demonstrable, it is not unreasonable to hope that vascular regression might be accomplished in some circumstances. Because of the early age at which the changes of the vascular tree which result in atherosclerosis begin, true prophylaxis, if it can be achieved by dietary measures, will indeed be a formidable task requiring changes in dietary habits of great segments of the world's population.

Other things which might arise as a result of this observation, perhaps including an increasing frequency of susceptibility to tuberculosis or other disease states, could theoretically present an even more formidable problem than attempts at the prevention of atherosclerosis. At present, control of obesity and hypertension is of as great importance as control of hypercholesterolemia or the increases of blood triglyceride levels. In light of our present knowledge it appears wise to attempt to reduce high concentrations of cholesterol and the triglycerides by appropriate dietary measures such as maintaining total fat calorie content of diets in a range not to exceed 30-40% of the total, and to advise the 70% of this total fat be provided in the form of poly-unsaturated vegetable or fish oil fats. The use of other adjuvant measures such as nicotinic acid, sitosterol, cholestyramine, heparin may be indicated or needed in individual cases, and will require careful check when so employed to avoid toxicity or untoward physiological effects. Other areas which perhaps may have some direct bearing on vascular thrombotic episodes as related to serum lipid concentrations have to do with further elucidation of the blood clotting

mechanisms and various factors, where there is evidence for some correlation. In addition, blood viscosity and erythrocyte tissue oxygen exchange are areas where further investigation is needed for clinical understanding and appropriate therapy in managing patients with established atherosclerosis.

Summary

Some of the current understanding and concepts of lipid metabolism have been reviewed. Cholesterol is only one of the serum lipids, although one to which greatest attention has been paid in recent years concerning its possible relationship to atherosclerosis and some of the other disease states in which hyperlipemia is evident. Serum triglycerides, phospholipids, the lipoprotein fractions, and free fatty acids are all interrelated with the problem of understanding factors which regulate cholesterol concentration, and the manner in which it is transported in the blood. Control of the other lipid fractions in the diet exerts a more profound effect on serum cholesterol values than does the amount of cholesterol which is ingested. In addition to the quantities of lipids which may be present in the plasma as a result of dietary intake, the rates of synthesis, degradation, storage, and removal from the plasma exert profound effects on serum lipid values. Except for certain of the poly-unsaturated fatty acids, synthesis of all the lipids is readily accomplished in the liver, and some of the other tissue sites. As an immediate source for energy by oxidation, the free fatty acids appear to be of considerable importance in many organ structures. Amino acids, dextrose, and fatty acids may be interchangeably metabolized and synthesized by the body by similar metabolic pathways. Although cholesterol is synthesized, and this is the source by which the greater proportion present in the body appears to be introduced, the phenanthrene ring of cholesterol is not split or broken down into acetate or a simpler radical, but is rather lost through excretion as free cholesterol, cholesterol esters, or bile

acids as degradation products through the biliary system, some smaller amounts likewise being lost into the intestinal lumen through desquamation and intestinal glandular secretion.

THERAPEUTIC AGENTS ADVOCATED OR REPORTED AS POSSESSING POTENT HYPOCHOLESTEROLEMIC EFFECTS

1. Neomycin—Through alteration of the gastrointestinal flora and changes in bile acid complexes decreases absorption of fatty acids and cholesterol, resulting in subsequent lowering of plasma lipid and beta lipoprotein values.

2. Exchange resins such as cholestyramine (MK 139)—through mechanism of blocking absorption of bile acids. By loss of these; the hepatic catabolic rate of breakdown of cholesterol to bile acids is enhanced with increased excretion of these degradation products of cholesterol. In addition, impairment of lipid absorption results from the loss of bile acids. With quite large doses, gross steatorrhea may be produced.

3. Poly-unsaturated fats of the vegetable and fish oil types—Increased fecal excretion of bile acids and cholesterol results from the feeding of the unsaturated fatty acids. In addition, there is evidence to indicate that alteration of intestinal flora results, with changes in the degradation products and impairment of reabsorption of the bile acids. Beta-lipoprotein levels, total cholesterol and triglyceride levels are decreased if weight gain does not occur and significant lowering occurs with weight reduction of a gradual type. Cholesterol synthesis is decreased in the liver.

4. Sitosterol—This vegetable sterid competes with free cholesterol for cholesterol-esterase and with cholesterol esters in the intestinal lumen for bile acids which by forming complexes with sitosterol are lost because these complexes are not readily absorbable by the intestinal mucosal cells.

5. Thyroid, D-Thyroxine, Acetic Tri-iodothyronine—Some of the synthetic thyroid sub-

stances are reputed to have more metabolic effect as regards lowering of cholesterol and lipids without the cardiovascular stimulatory effects. However, patients with angina have more frequent attacks, and hypothyroids do respond with large doses. The euthyroid patient tolerates these best. Perhaps in some instances of familial hypocholesterolemia, these may be superior to other forms of therapy now available. After a time TSH seems to be suppressed by these preparations, and elevation of cholesterol may then occur due to a depression of normal thyroid function.

6. Triparanol — (MER/29) — This agent blocks cholesterol synthesis after formation of the hydroxysteroid nucleus from acetate at the level of desmosterol, which is normally absent from the serum but appears in measurable quantity after the administration of triparanol. A routine serum cholesterol determination in a subject receiving triparanol may indicate a falsely low value for the sum of cholesterol and desmosterol, but a falsely high value for cholesterol itself due to the contribution of desmosterol to the intensity of the color reaction employed by some of the methods currently used in hospital laboratories for cholesterol determination. Tissue cholesterol concentrations are likewise reduced, but total sterole concentration rises due to accumulation of desmosterol in the tissues. There is increased conversion of cholesterol precursors to bile acids, and perhaps also some increase in production of bile acids from cholesterol, or at least no depression of this. During periods of administration of MER/29, bromsulphalen excretion may be impaired, and serum alkaline phosphatase levels may also rise, but no permanent impairment of hepatic function has been observed after discontinuance. There is evidence to suggest some impairment of response of the adrenal cortex to ACTH stimulation during treatment with this preparation, and where triparanol and nicotinic acid have been given concomitantly in the usual dose range there is evidence to indicate diminution of synthesis of the adrenal steroids. Investigators are now exploring the use-

fulness of triparanol in therapy of hyperadrenocorticism, and remission of Cushing's syndrome has been achieved in a few patients as has reduction in androgen secretion in patients with the adreno-genital syndrome, indicating that steroid synthesis is interfered with not only in the liver, but also in the other tissues of the body where this and cholesterol synthesis occur. Cataract, hair and skin changes are serious toxic manifestations, and use of this drug must remain in the research area.

7. Nicotinic Acid—The mechanism whereby hypocholesterolemia is produced by nicotinic acid or its conjugate, nicotinuric acid, is not known. Nicotinomide is not effective, and with the administration of nicotinic acid does not conjugate with glycine to form nicotinuric acid, so that probably this is the active fraction. Abnormalities in liver function, including elevation of the cephalin flocculation test, alkaline phosphatase, and serum transaminase levels may occur. Histological examination has not revealed any significant evidence of liver injury. Bilirubinemia may result, and on post-mortem examination changes showing centrolobular biliary stasis and fatty infiltration have been observed. The hepatic changes have been more frequently observed with certain of the long-acting salts of nicotinic acid than apparently have been observed with acid itself. In addition, nausea, vomiting, and anorexia have been more prominent with the salts than with the acid. In addition to a reduction in total cholesterol, there is diminution of the beta-lipoprotein level; the alpha-lipoprotein fraction remains constant or is at times slightly increased, and serum triglyceride levels decrease. Essential hyperlipemias appear to respond better to heparin with simultaneous administration of nicotinic acid.

8. EDTA—This chelating agent has been reported as producing decreases of as much as 60% in serum cholesterol levels, with persistence in such reduction for periods of 18 to 30 months after intravenous administration of the preparation for periods of one to two weeks. No explanation for this effect is as

yet at hand. Perhaps it may be related to changes in calcium and magnesium ion concentration.

9. Heparin—By releasing tissue lipase enzymes, triglycerides are broken down with release of fatty acids and clearing of chylomicrons from the serum, with resultant decrease also in the lighter fractions of the beta-lipoprotein group. Associated with this, decrease in serum cholesterol occurs and reduction in the beta-lipoprotein fraction. Alpha-lipoprotein concentration may increase. Patients with hyperlipemia are most responsive to heparin administration. Those atherosclerotics who show prolonged or delayed clearing and elevation of the triglyceride fraction are in theory the best candidates for this form of therapy. In some, the administration of nicotinic acid appears to enhance these effects. In others of the hyperlipemics, strict reduction of dietary fat must also be employed. Sublingual heparin has been reported by some as being effective, but there are many conflicting reports as to its efficacy in the literature. Certain orally administered heparinoid-like preparations may prove to be clinically effective, such as sulfopolyglucin, but considerably more investigation is needed for many of these preparations before the full spectrum of usefulness and safety can be determined.

10. Salicylates—Both as sodium salicylate, aspirin, and PAS when administered in large doses of 5 to 12 grams daily reduce serum lipids as much as 20 to 30%. Tinnitus, nausea, vomiting and salicylate toxicity may limit the use of these drugs in various subjects. The mechanism of action is as yet not clearly understood. There may also be associated decrease in blood glucose values and some rise in non-esterified fatty acids. More investigation is needed in regards to the efficacy of the salicylates.

11. Estrogens—Increase alpha-lipoprotein. There is also a rise in the serum phospholipids and decrease in beta-lipoprotein fraction. Feminization may be an undesirable side effect. As yet, estrogenic substances with

diminution in feminizing properties have not been found to be efficacious.

12. Testosterone—Tends to elevate the beta-lipoprotein fraction, and although efficacious in reducing cholesterol degradation to bile acids and useful in that respect in controlling pruritis, tends to produce cholestasis. Some derivatives of testosterone, such as those of the androsterone group, possess a hypocholesterolemic effect with reduction in low density beta-lipoprotein and chylomicron levels, with hypocholesterolemic effects secondary to this. Perhaps some of the essential hyperlipemic states may be found to be the conditions where these preparations may be of most value, but considerable further study appears to be necessary.

13. Lipotropic Agents—Because of their effects in regard to mobilization of fat from the hepatic cells, with increase in phospholipid production, methionine, betaine, choline, inositol, vitamin B₁₂ folic acid, and beta-propiethetin have been tried as hypocholesterolemic agents. The consensus as regards the evaluation of these preparations appears to be that they are not of value except where indicated in the treatment of hepatic disease.

Vitamin E, or alphatocopherol — Some studies have indicated the lowering of serum cholesterol level in patients, but the consensus is that this substance is needed only to protect tissue lipids from peroxidation so as to prevent the unsaturated fatty acids from being converted into saturated fats. Evidence now available suggests that in diets where large amounts of unsaturated fatty acids are consumed, that additional vitamin E may be needed with quantities perhaps of as much as 30 mg per day being advisable. Supplements of pyridoxine may also be found necessary to protect arachidonic acid.

14. Other agents such as those of the Probenecid type of compounds have been observed to exert blocking effects in the synthesis reactions by which acetate becomes incorporated to the mevalonic acid and squalene group of compounds. Because of

the essential nature of these reactions in the synthesis of the adrenal and sex steroid endocrines, the usefulness of any of these blocking agents must await very careful evaluation as to the more general metabolic disturbances which might ensue over and be-

yond interfering with production of cholesterol itself.¹⁷

15. Insulin—Should be used only for the treatment of diabetes and not used *per se* for its effects on lipid metabolism.

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Medical College Clinic

POISONING OF THE MONTH

BY

MARGARET Q. JENKINS, M. D.

Case Report: This two year old white female was allegedly in good health until three days prior to admission when she ran fever and the parents suspected a sore throat. She was seen by her family physician who treated her for pharyngitis. That afternoon she became irritable, ran a high fever, and went into a deep sleep. She was hospitalized in another city because of this marked somnolence and depression, and the parents were told that poliomyelitis was suspected. However, in view of transient improvement she was discharged that afternoon on a medication.

Her mother states that she remained quite depressed and somnolent and she became quite difficult to arouse at times. She had been very ataxic and depressed and had vomited all oral intake for the 12 hours prior to admission. Due to this she was admitted to Roper Hospital for diagnosis and treatment.

On extensive questioning it was found that her play area had been treated for a severe involvement with fleas with a benzene hexachloride compound one week prior to the onset of the child's illness. There were reported to be numerous ticks in the

neighborhood. No history of head trauma could be elicited.

The past history showed adequate immunizations including Salk polio vaccine. There was no family history of allergies or other disease.

The physical examination showed a well developed and nourished two year old white female who was lethargic, irritable when disturbed, and was ataxic with a wide based gait and tendency to fall to either side, and had marked clumsiness of upper extremities when playing with toys in bed. Her head had a normal contour without abnormalities. The pupils were slightly dilated with a sluggish reaction to light, the fundi were normal. The ENT was negative and the lungs were clear. The heart had a functional systolic murmur along the left sternal border and the abdomen was negative. The muscle power of the extremities was fair to poor with generally poor coordination. The reflexes were normal and equal. There was no cranial nerve abnormality. No ticks were found on the patient after careful examination.

The laboratory evaluation showed normal hemoglobin and red blood count. The white blood count revealed mild leucocytosis with 8 eosinophiles, but otherwise normal differential. The specific gravity of the urine was 1.010. There was no albumin, sugar or acetone. Microscopic view showed 15-20 WBC with occasional clumps and rare coarse granular casts. On lumbar puncture the spinal fluid was under normal pressure and revealed 2 cells, sugar 66 mg/100 ml, protein 13 mg. The stool culture was negative for salmonella and shigella.

Improvement was rapid after the patient's admission. Somnolence and lethargy cleared within a period of 12 hours. The patient then became perfectly alert with no complaints. She was discharged two days after admission with a final diagnosis of benzene hexachloride intoxication.

Discussion: Benzene hexachloride (hexachlorocyclohexane) is stable for three to six weeks after application. Wettable powders, emulsions, dusts, and solutions in organic solvents are available for insecticides. Both the technical preparation and the gamma isomer (Lindane) are used in vaporizers.

Technical benzene hexachloride and Lindane stimu-

late the CNS to cause hyperirritability, ataxia and convulsions. Pulmonary edema and vascular collapse may also be of neurogenic origin. Effects of Lindane on experimental animals have their onset within 30 minutes and last up to 24 hours; with the technical product, onset of effects may be delayed one to six hours and then will persist up to four days.

The principal manifestations of poisoning with benzene hexachloride or Lindane are vomiting, tremors and convulsions. In acute poisoning (from ingestion or massive skin contamination with a concentrated solution in an organic solvent) symptoms begin one to six hours after exposure. Vomiting and diarrhea appear first and progress to convulsions. Recovery is likely unless the material contains an organic solvent, in which case dyspnea, cyanosis, and circulatory failure may progress rapidly. Exposure to smaller amounts by skin contamination or by ingestion leads to dizziness, headache, nausea, tremors, and muscular weakness.

Benzene hexachloride is stored in the body fat, being slowly lost through metabolism or excretion in urine, feces, or milk. Of the various isomers of benzene hexachloride, Lindane is excreted most rapidly.

The most prominent feature of benzene hexachloride or Lindane poisoning in animals is liver necrosis. Other changes which have been seen in experimentally poisoned animals are hyaline degeneration of renal tubular epithelium and histologic changes in the brain, adrenal cortex, and bone marrow.

Clinical laboratory tests are noncontributory. Liver function may be impaired. Specific examination of feces, urine or fat may reveal the presence of benzene hexachloride.

The treatment of acute benzene hexachloride poisoning consists of removal from the skin by thorough bathing and from the stomach, if poison is ingested, by emesis, lavage or catharsis. No antidote is known. Anticonvulsants such as phenobarbital, when indicated, are suggested. Stimulants such as epinephrine, are extremely dangerous. Calcium intravenously is recommended as a non-specific cellular protectant.

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President's Page

While the King-Anderson Bill at the moment is sleeping, because of the interest of the so-called "liberalists" in other matters, it is by no means dead and will certainly be revived after the first of the year. We all know the objections to this legislation. First of all, it is not insurance but an outright subsidy. It has been the experience of other countries that the costs are always much higher than the initial estimates, and Senator Russell Long of Louisiana has stated that in his opinion it would amount to 52 billion dollars a year. The administrative tangles and the increased paper work defy the imagination. It would limit the scientific freedom to practice medicine; it would restrict the choice of physician by the patient; it would be limited to the use of federally approved facilities; and it would certainly be the worst possible example for the student of medicine. Unlike the righteous girl who proceeded to put on her clothes when she found that her client was married, with the thought that her services were for the needy and not for the greedy, the King-Anderson proposal would give unneeded help to the well-to-do at a staggering cost to the poor and to the young. The enactment of the Medicare type of legislation would not be the beginning of socialized medicine; it would be the real McCoy.



I have recently received from the Young Democratic Volunteer Club of Charleston County a number of pamphlets from the National Council of Senior Citizens advocating the passage of the Medicare Bill. The statistical data note that there are nearly 18 million United States citizens over the age of 65 and their numbers increase by about 1000 every day. It is also noted that hospital costs now average \$35.00 a day. This Council states that hospital insurance under Social Security can be procured for all at the age of 65 at a cost of only 25¢ a week.

On the basis of these data, if there were 100 million employees paying 25¢ a week, the total amount collected would pay for 2 hospital days per year for all senior citizens. However, there are less than 75 million workers under Social Security today, so this figure would have to be proportionately lowered. If one individual, continuously employed from the age of 20 until he reached the age of 65 paid at this rate, the total amount collected would be sufficient to pay for $16\frac{3}{4}$ hospital days per person, presumably for the remainder of his life. Our own experience with Blue Cross in this state shows that the hospital utilization by individuals over the age of 65 is almost twice that of the average utilization for all Blue Cross patients, and the length of stay in the hospital for each illness is 13.9 days, also almost twice the average stay for all types of patients. This can mean but one thing and that is that somebody else must make up the difference in cost; that "somebody else" is the taxpayer.

In addition to all of these arguments, a most cogent reason for its disapproval is its inherent dishonesty. The Medicare Bill contracts to supply to the elderly individual a service which no governmental agency is in a position to render. It is ridiculous to maintain that simply because it does not provide for payment directly to the doctor it should not effect him, for who but the doctor can utilize the facilities of hospitals and nursing homes and the other services provided.

If one contracts to sell a stock or a commodity short, with a promise to deliver at a future date, the individual can purchase the item when delivery is due. If he then has to buy it in at a price more than that for which it was sold, he has lost money, but at least he is able to deliver the stock or the commodity as specified. But when the Federal Government undertakes to supply medical care under a contract for which payment is received from the

individual, it would be completely unable to meet the terms of the contract except through the medical profession. No governmental agency is licensed to practice medicine, no federal, state or community agency is able to deliver the medical care for which the contract is made. There is no possible way in which this can be done. One simply asks if it is honest for the Federal Government to undertake a contract which cannot be fulfilled.

Perhaps I was mistaken when I stated that there was no way in which this could be done; there is one way and it is simply slavery. Although this was abolished by Abraham Lincoln's Proclamation over one hundred years ago, we now have the spectacle of the President of the United States, organized labor, many members of Congress, and many church organizations advocating the adoption of legislation with contractual relationships that can be accomplished only by the forced labor of a small segment of the population. It is my contention that those who advocate this legislation simply do not know what they are doing; one can at least give them the credit of ignorance and not the accusation of wanton disregard of liberty.

Medicine is a proud profession. The proposals and influences of today are steadily seeking to drive us, for our self protection, into the status of trade-unionism. It is sad to think that in the name of progress and in the name of liberalism, these forces would begin the toll of the bells for the death of medicine as a profession.

Robert Wilson, M. D.

Editorials

Kerr-Mills Trouble in South Carolina

The medical profession everywhere has supported the Kerr-Mills Act as a means of providing aid to the needy older people over the country. In general the provisions of the act have seemed to be effective. In many places utilization has increased, benefits have been made more liberal, and satisfaction among recipients has been pleasing. These practical results of the stated purpose of the act have done much to persuade the public that government is doing its part to meet a recognized need and that other proposals of the King-Anderson type are neither necessary nor desirous.

Unfortunately, many of the hospitals of South Carolina are having difficulties with the payments allowed by the State Department of Public Welfare, which administers the act. Since the larger hospitals offer much more diverse and inclusive service, their costs of patient care are considerably higher than are those in the smaller institutions, and a per diem payment based on overall average costs of patient care in the state does not approach the figure essential to the major hospitals. These hospitals must face an actual loss of money in caring for patients under the Kerr-Mills category. Several of our largest hospitals

have recently declined to accept these patients for obvious financial reasons.

This situation creates embarrassment for the physician who refers patients and for the patients who do not understand why they cannot have free choice in obtaining the hospital benefits promised under the act. The only solution seems to lie in acceptance by the Department of Welfare of realistic reimbursable cost figures for the larger hospitals, which cannot afford to promote the continuing loss of money. Unless some adjustment is made, considerable harm will be done to a program which is heartily endorsed by the medical profession and acts as a constant buffer against the many legislative proposals which are repugnant to the profession.

Pigeons on the Grass, Alas!

Because two deaths from cryptococcus neoformans meningitis have occurred in New York City, a health department official advocates liquidation of the five million city pigeons who are potential carriers of the disease. This will not solve any traffic problems. Maybe some of the surplus humans who carry many other diseases might be eradicated with more benefit to the city.

Public Relations

King-Anderson Hearings

The death of President John F. Kennedy at 2:00 p. m. on November 22 interrupted the hearings on H.R. 3920 and caused **Wilbur D. Mills**, Chairman of the Ways and Means Committee, to recess until further notice. The Committee is currently busy on the tax bill and since it is generally agreed that Congress will recess on or about December 20 there seems little likelihood that anything further will be done on the bill during this session of Congress.

The hearings started on November 18. The schedule was crowded. Hearings lasted all day long, even until 8:30 one evening. Most of the testimony was repetitious, contributing little new information. On several occasions the large room was packed with crowds of senior citizens shepherded—or herded—into the room by some manager or by the former lobbyist for the nationalization of medicine, **William G. Reidy**, now Staff Director of the **Smathers Special Committee on Aging**.

Testimony by the insurance industry, the American Medical Association, and representatives of State medical societies was factual and informative. Reports on the operation of the Kerr-Mills law in those States with satisfactory programs came as eye-openers to Committee members after the inaccurate and denigrating statements which had been put out by the Department of Health, Education, and Welfare.

Conflicting claims and charges by opponents and proponents of partial compulsory health insurance for the aged, through use of the social insurance mechanism of the Social Security Act, will have to be weighed objectively by the Ways and Means Committee.

In these hearings on H.R. 3920 the bitterness of the times was clearly shown. Most of the Democrats on the Committee, save for the Chairman, seemed to be more interested in vitriolic attacks on individuals and organizations opposing the legislation than they were in discussing the merits or demerits of the bill. This was particularly noticeable on Thursday, November 21, when **Edward R. Annis**, M. D., President of the American Medical Association, testified, and on November 22 when Representative **Frank T. Bow** (R., Ohio) and representatives of the insurance industry spoke against the bill.

Three Democratic members of the Committee, who shall be nameless, were engaged in a most acidulous form of questioning and badgering at the very moment the former President was shot in Dallas. On the preceding day one Democrat had asserted, after a few personal jabs which had nothing to do with the bill, that he saw no reason to ask further questions of Dr. Annis. Another Democrat referred to a newspaper account that a union official had sued the AMA. The questioning had nothing to do with the bill.

When the hearings resume, it is to be hoped interrogations will be designed to elicit information that has some constructive bearing on H.R. 3920. Democrats on the Committee wishing to honor the dead President might reverently drop the hate and needling tactics they have employed thus far. Chairman Mills sets an admirable example of courtesy, restraint, and equanimity. His questions are designed to elicit professional opinions on Social Security compulsory health insurance for the aged. They are not devised to make witnesses defend themselves from personal attacks and insinuations.

Challenge to Socialism, December 5, 1963

MEDICAL TELEVISION PROGRAM

February 6th and 7th, 1964

8:00 to 9:30 P. M.

PYELONEPHRITIS

News

Medical Emergency Plans

Representatives of York County and all its towns and cities were asked to meet at the county office building to create a working civil defense and disaster plan covering the fields of health, medical service and burial of disaster victims.

Dr. Alton Brown, county emergency medical service director, interviewed all doctors and nurses for the purpose of assigning specific disaster duties.

Plan Re-opening Of Old Hospital

Oconee Memorial Hospital Association is currently seeking funds with which to re-open the old hospital building as a chronic and convalescent center.

According to current plans, it is hoped that the building can be renovated to accommodate 40 beds for chronic and convalescent cases, and 20 nursing home beds — plus facilities for recreation and treatment.

Manual On Civilian Care to Dependents

The Office for Dependents' Medical Care has prepared a manual for Physicians and Dentists Providing Civilian Care to Dependents of the United States Uniformed Services. This manual should be of great assistance to doctors and doctors' aides in preparing and submitting claims for care under the Dependents' Medical Care Program. The manual does not contain a fee schedule but does provide information on authorized care, eligibility and identification of eligible dependents, etc.

Physicians participating in the Program are requested to charge their usual or normal fee for like services provided to individuals with an annual income of \$4500.

A copy of the manual will be mailed to all physicians in South Carolina.

Physicians are also requested to provide the fiscal agent, Dependents' Medical Care, Mutual of Omaha Insurance Company, P. O. Box 1298, Omaha, Nebraska, 68101, of their Internal Revenue Service identification number (employer identification number, personal Social Security number).

Coastal Medical Society

The Coastal Medical Society met Thursday, November 21, at the Southland Restaurant, Walterboro. Dr. Raymond Price, Jr., of Charleston spoke on "The Treatment of Pyelonephritis."

Dr. Robert Wilson Elected

At the Annual Meeting of the St. Andrew's Society on November 30, 1963, in Charleston, complete with haggis, kilts, bagpipes, and old Scottish sentiment,

Dr. Robert Wilson was elected president of that ancient organization.

Columbia Medical Society

The guest speaker for the February Scientific Meeting of the Columbia Medical Society will be Dr. Frank H. Krusen, Professor and Coordinator of Physical Medicine and Rehabilitation at Temple University Medical Center in Philadelphia. Dr. Krusen will address the group on modern developments in rehabilitation of the chronically ill and the seriously injured.

Dr. Izard Josey of Columbia will speak on the subject of "Twelfth Dorsal Sensory Radiculitis," by Dr. Josey and Dr. W. W. Ledyard. The meeting will be held at the Columbia Hotel at 7:00 p. m., Monday, February 10th.

Dr. Drusen's participation in the Columbia Medical Society meeting is being sponsored by the Vocational Rehabilitation Agency of South Carolina.

American Academy of Pediatrics

Drs. Belton D. Caughman of Columbia, Marion R. Caughman of Orangeburg, James E. Padgett, Jr. of Aiken, and W. Curtis Watkins of Conway have recently been elected new members of the American Academy of Pediatrics.

Charleston County Medical Society

At the November meeting of the Charleston County Medical Society the following officers were elected: President, C. W. Evatt; vice president, P. C. Jenkins; secretary, L. P. Jervey.

Medical Society of South Carolina

At the annual meeting on November 14 of the Medical Society of South Carolina, the following officers were named:

President, Dr. Arthur Rivers; Vice president, Dr. Bachman Smith; Secretary and treasurer, Dr. F. M. Ball; and Librarian, Dr. Joseph I. Waring.

Opening For McLeod Annex

The McLeod Annex, formerly the Florence-Darlington Tuberculosis Sanatorium was scheduled to be opened for use November 4.

The opening encompasses half the facilities, with two nursing units. The psychiatric unit will have 23 beds, and the chronic convalescent unit 30.

The addition, located on the Florence - Darlington Highway (U. S. 52), will boost McLeod capacity to 283. The rest of the building will be opened later as chronic convalescent. It will add another 59 beds.

Obstetrical, Gynecological Society Backs Birth Control

The South Carolina Obstetrical and Gynecological Society has unanimously approved planned parenthood and urges birth control programs on state and local levels, the society said in a statement released recently.

The resolution was adopted at the society's 17th annual meeting at Litchfield Inn, October 4-5. The resolution said:

"This society believes that full freedom should be extended to all population groups for the selection and use of such methods for the regulation of family size as are consistent with the creed and mores of the individuals concerned.

"It also endorses and encourages the programs of organizations on state and local levels to promote responsible parenthood."

Organizations to promote planned parenthood have been established in Kershaw, Richland, Lexington, Beaufort, and Colleton counties, the society said.

Florence County has an extensive voluntary birth control program limited to low income families. The program uses a drug with the brand name "Enovid." At the time of its inception it was the first such program in the state to use an oral contraceptive with the backing of public funds at county and state level.

The Columbia Medical Society of Richland County has adopted resolutions supporting voluntary birth control as has the Columbia Ministerial Association.

Dr. Kilgore Addressed Anderson Chamber of Commerce

The King-Anderson bill is a "bad bargain at a high price," Dr. Donald G. Kilgore, Greenville pathologist, told the Anderson Chamber of Commerce Breakfast Club on November 27.

Dr. Charles H. Brown of Anderson introduced the guest speaker.

New Orleans Graduate Medical Assembly

The twenty-seventh annual meeting of the New Orleans Graduate Medical Assembly will be held on March 2, 3, 4, 5, 1964. Registration fee of \$20 includes lectures, medical motion pictures, symposia, clinicopathologic conferences, technical exhibits, three round-table luncheons, planned entertainment for visiting ladies, and other features.

The program is acceptable for twenty-nine accredited hours by the American Academy of General Practice.

Following the meeting a clinical tour is planned for three weeks in Europe's great cities — Lisbon, Madrid, Rome, Vienna, Berlin, and Paris.

For information address:

The New Orleans Graduate Medical Assembly
1430 Tulane Avenue
New Orleans, Louisiana, 70112

SCMA Opposed To Social Security Medicare

The South Carolina Medical Association is on record opposing the King-Anderson Bill calling for Social Security-financing of medical care for the aged.

In a statement filed with the House Ways and Means Committee, the state's association instead emphasized the "adequate provisions" of the Kerr-Mills Act for the care of the aged in South Carolina.

The statement, by Dr. Robert Wilson of Charleston, president, detailed the means now available for payment of the medical and hospital care of citizens of the state over age 65.

Dr. Wilson noted that the Association has been the vanguard in securing passage of statewide law for the organization of a non-profit hospital service plan.

After the Kerr-Mills Act was passed by Congress in 1960, the next session of the South Carolina General Assembly, in 1961, endorsed the measure.

Dr. Wilson stressed that the AMA, in cooperation with other agencies, sponsored legislation to implement the act in the state.

Dr. Sam Harris Will Author Bridge Column

Dr. Sam Harris, a Myrtle Beach physician and a longtime duplicate bridge enthusiast, will write a weekly column for the *Sun-News*, Myrtle Beach.

Dr. Slone Named President of Florence County Society

Dr. Allen R. Slone has been elected to succeed Dr. Marion Carr, Jr. as president of the Florence County Medical Society.

Dr. Slone, secretary and treasurer of the group this year, has headed up the Society's sponsorship of the Stop Polio Sundays campaign.

Dr. Dexter Evans of Lake City was elected vice president; and Dr. David McLain was named secretary-treasurer.

Dr. Harold Jeter was named senior delegate to the S. C. Medical Association convention next summer, with Dr. E. W. Taylor as junior delegate and Dr. John Hunter and Dr. Robert Whitehead as alternates.

Dr. Slone is a native of Alabama, attaining his B. S. degree at Wofford, his M. S. degree from Clemson and his M. D. degree from the Medical College of South Carolina.

He has been in South Carolina since World War II, and in Florence since 1955.

The election was held at the recent county Society annual meeting, at which Dr. H. R. Pratt-Thomas, president of the Medical College, was speaker.

Dr. Needham L. Long

Dr. Needham L. Long has recently gone into the practice of pathology in Columbia with Drs. DuBose Dent, Jr., and J. R. Cain.

Course Set On Medical Technology

A four-year curriculum in medical technology, leading to the B.S. degree, begins next year at Clemson College in cooperation with the Greenville General Hospital.

Dr. Jack K. Williams, vice president for academic affairs and dean of the college, said students will spend three years at Clemson and the fourth at Greenville General, where they will attend classes conducted by hospital instructors, who will be listed also as lecturers on the Clemson faculty.

The following five members of the Greenville General Hospital staff will affiliate informally with the Clemson faculty as lecturers in medical technology: Drs. Ewing A. Dreskin, Donald G. Kilgore, Jr., Washington W. Waters, Bernhard L. Ludvigsen, and Glenn E. Potts.

American College of Allergists

American College of Allergists Graduate Instructional Course and Twentieth Annual Congress, March 1-6, 1964, The Americana, Bal Harbour, Miami Beach, Florida.

For further information write: John D. Gillaspie, M. D., Treasurer, 2141 14th Street, Boulder, Colorado.

Dr. Paul Named Chairman

Dr. John R. Paul, Jr., Medical College Hospital, Charleston, has been named chairman of the Committee on School Health of the American Academy of Pediatrics.

Dr. Newsom Opens Offices

Dr. Joe Newsom and Dr. John Ervin of Cheraw have dissolved their medical partnership.

Dr. Newsom has opened his own offices at 105 Huger Street for the practice of general medicine.

Dr. Dawson President Of Association

Dr. George R. Dawson, Jr. of Florence was recently elected president of the South Carolina Orthopedic Association during a meeting at Hilton Head Island.

Elected secretary-treasurer was Dr. Robert M. Paulling of Charleston.

Volunteer Chaplain Program

The Bamberg County Ministerial Association, composed of the pastors of all churches in the county, is beginning a volunteer chaplaincy program in the Bamberg County Memorial Hospital. This is being done with the unanimous approval of the administration and the hospital staff. A minister will be on duty each week, serving as chaplain. This program is not designed to take the place of the visitation of the patients by their own pastors, but to supplement it and see to it that the spiritual needs of all the patients are met.

Emergency Hospital Moved

Citizens of Oconee county saw the 200-bed Civil

Defense Emergency Hospital when the hospital was moved from its old location in the basement of the Oconee County courthouse to its new storage location in the basement of the old Oconee Memorial Hospital.

The hospital received its annual inspection and replacement of certain medications and drugs by an inspection team from the General Service Administration, Rockwood, Tenn. during the course of the move.

Dr. J. P. Booker of Walhalla has accepted the post of chief, Emergency Health and Medical Service for Civil Defense, and has appointed Dr. S. B. Moyle as chief of the Medical Care Division, Fred Ellison as chief of the Administrative Division and Dr. C. E. Ballard as chief of the Public Health Division.

Two Negro Doctors Invited To Join Hospital Staff

Dr. D. M. Duckett and Dr. Hugh A. Hogans, Negro physicians, have been invited to apply for active membership on the York General Hospital medical staff.

County Officials Meeting Scheduled

The tentative date of February 16 has been set for the annual meeting in Columbia of county medical society officials and other interested persons which is sponsored by the South Carolina Medical Association. Officers, public relations committee chairmen and any others who are interested will be invited to this session. There will be consideration of the usual affairs and problems of county medical societies, some discussion of matters of public relations, insurance, and other related subjects.

A definite notice will be sent in ample time.

The officers of the Association urge attendance at this meeting. Those sessions held in the past have been interesting and beneficial.

Brewer Hospital Names Officers

Dr. I. M. Tompkins has been re-elected president of the Brewer Hospital staff for the fifth year.

Other officers are Dr. R. E. Hunton, vice-president, and Dr. J. Roland McKinney, secretary.

Dr. Valley, Hospital Chief

At a recent meeting of the staff of Cannon Memorial Hospital, Pickens, Dr. T. P. Valley was elected chief of staff. Dr. David Mauldin was named vice chief and Dr. A. J. Reinovsky was elected as secretary.

Dr. Perry To Leave Sonoco

Dr. J. M. Perry, Jr., medical director of Sonoco Products Company, has announced his resignation effective March 1, 1964. He will return to private practice in Madill, Oklahoma. He joined Sonoco in September, 1955.

Jennings Heads Rescue Squad

The Marlboro County Rescue Squad elected Dr. Douglas Jennings as its new president. In this capacity Dr. Jennings succeeds Dr. C. R. May.

Dr. Caston Joins VA Hospital

The appointment of a new psychologist at the Veterans Hospital in Columbia has been announced by Dr. Chalmer Davee, director.

Dr. W. Frank Caston is the new clinical and counseling psychologist. He comes from Whitten Village at Clinton where he served on the staff for about five years.

Physicians Announce Partnership

Three Lancaster physicians have announced a partnership in the practice of general medicine. Drs. J. P. Horton, Jr., W. E. Sims, Jr., and R. Y. Westcoat have moved their offices to the new Medical Building on Woodland Drive.

Dr. J. Reece Funderburk, Jr., also has office space in the building for the practice of dental surgery.

Dr. Huntington Begins Practice

Dr. Forrest Kay Huntington has opened an office for the practice of Internal Medicine in association with Dr. John C. Muller at 710-A Pendleton Street, Columbia, S. C.

Dr. Huntington is a native of Fayetteville, Ark. He received his medical degree from the University of Rochester at Rochester, N. Y. He served a one-year internship and a one-year residency in general practice at the North Carolina Memorial Hospital at Chapel Hill.

Following this, Dr. Huntington spent two years in the U. S. Army Medical Corps. He then had a residency in internal medicine at the upstate New York Medical Center in Syracuse, N. Y., and has recently completed two years training in Gastroenterology at North Carolina Memorial Hospital.

Some Actions of The House of Delegates American Medical Association December 1-4, 1963

Dr. Edward R. Annis, AMA president, reporting on the recent House Ways and Means Committee hearings on the King-Anderson Bill, told the House: "The combined testimony of the American Medi-

cal Association, the state societies and our allies made a far greater impact on the members of the committee, friend and foe alike, than at any other time in the history of this long and bitter conflict."

Dr. Annis also reported that under questioning from Committee Chairman Wilbur Mills, actuaries of the Department of Health, Education and Welfare admitted that the program of tax-paid hospitalization and related benefits for the aged proposed in the King-Anderson Bill would require a tax rate twice as high as they have previously claimed.

Negro Physicians

The House considered two proposals related to Negro physicians—a Board report on hospital staff privileges and a resolution concerning membership eligibility in state and county medical societies. The Board report was approved, but the resolution was not adopted.

In adopting the Board report, the House declared that "members of the medical staff of every hospital, where the admission of physicians to hospital staff privileges is subject to restrictive policies and practices based on race, be urged to study this question in the light of prevailing conditions with a view to taking such steps as they may elect to the end that all men and women professionally and ethically qualified shall be eligible for admission to hospital staff privileges on an equal basis, regardless of race."

In both its approval of the Board report and its rejection of the proposed resolution—which would have denied the rights and privileges of AMA membership to members of any state or county society which refuses membership to any qualified physician because of race, religion or place of national origin—the House reaffirmed 1950 and 1952 policy actions on this subject that a copy of the 1950 resolution again be sent to each state and county medical society. That resolution urged that "constituent and component societies having restrictive membership provisions based on race study this question in the light of prevailing conditions with a view to taking such steps as they may elect to eliminate such restrictive provisions."

Voluntary Health Agencies

In approving a Board report on professional relationships with voluntary health agencies, the House declared that "the AMA maintain its policy of neither approving nor disapproving national voluntary health agencies." It also agreed "that the AMA, through its Committee on Voluntary Health Agencies, maintain its position of offering guidance on medical aspects of national voluntary health agency programs."

NURSING EDUCATION TODAY

J. DECHERD GUESS, M. D.
Greenville, South Carolina

The whole field of nursing education is in a state of ferment amounting to revolution. There are active changes in the concept and the objectives of the training of nurses and the relationships of nurses to their patients and to doctors. As in all revolutions, there have developed wide differences in the degree of acceptance of proposed changes, along with animosities, frustrations, and antagonisms, which in turn have given rise to changes in relationships between groups interested in the education of nurses, the employment of nurses in training schools and in hospitals, and the direction of nurses by doctors in the care of the sick. The changes in group relationships is reflected in current literature dealing with the subject of nursing education and the objectives and philosophy of nursing as a profession.^{4, 8, 9, 10}

Margaret Bridgman, one time consultant in general education for the National League of Nursing and consultant in collegiate nursing education for the Russell Sage Foundation, 1948-1952, wrote in 1960:¹

In nursing, adjustment of its education to changes has been more difficult and slower than in other fields because of historical circumstances. With schools dependent upon hospital funds and hospitals dependent upon student service, there was practically no freedom to change educational patterns. So little happened for so long that recent years have brought great pressure to do something quickly to meet needs already critical.

Recent changes in nurse education have seemed sudden after about seventy-five years of almost complete freezing of the education in one mold. It is hard to break the habit of thinking of nursing as the same for all who perform it but different from any other occupation and appropriately prepared for in only one way which is unique in its field. Suddenness of the present educational developments rather than any thing strange in the developments themselves has led to the confusion.

Shortage of Nurses

The seriousness of the nurse shortage was first realized shortly after World War II. Then began a sequence of circumstances, so suddenly and worsening so rapidly, that for ten years, nurse shortage has been in a state of crisis, ever increasing in severity.

Rapidly advancing medical science rapidly made available a vast new armamentarium of new drugs and new techniques, with great potentialities for good in medical treatment, but with equal potentialities for harm if their use is not understood. The

entire system of medical, surgical, and psychiatric practice has been drastically changed. Nurses, as well as doctors, have been required to learn new skills. More patients require skillful, scientific nursing in contradistinction to what might be termed "companionate" nursing.

Improved ability to purchase hospital care for the sick through improved economic conditions, and the ever increasing purchase of sickness insurance, the desirability, and often the necessity of hospital environment for the application of newer scientific therapy; the unavailability of home nursing by a member of the family, relatives, or friends because of the widespread and increasing entrance of women into business and industry; and the rapid increase in available hospital beds, both by reason of enlargement of existing hospitals and by the construction of community hospitals throughout the state, making hospitalization easily available to everyone, brought into being a rapidly increasing demand for more nurses. At the same time there developed a reaction against using students in hospital training schools for nursing service.

The population of South Carolina has increased by almost half a million since 1940.⁵ In 1963, almost two thousand more white girls graduated from high school than in 1955. However, in 1955, five hundred and eight, or 8.1%, of high school graduates entered training schools for nurses. In 1962, only 426 high school graduates, or 5.4%, began nurse training. That year, there were 67 vacancies in hospital diploma schools for nursing. For some reason, a career in nursing seems to be losing its appeal to high school graduates.

Not only are fewer high school graduates entering hospital training schools, but there is occurring an increasing rate of attrition of matriculates.

In 1961, more than 30% of the class which entered training three years before failed to graduate. This is not the whole story. The percentage of hospital training school graduates who failed the licensure examinations on the first writing has increased from 32% in 1958 to 52% in 1961.

Five hundred students were admitted to diploma schools of nursing in 1958. Only 337 of these were graduated in 1961. Drop-outs and flunk-outs accounted for a loss of 163, a loss ratio of 32%. Of the 337 who graduated, 175 (52%) failed to pass the examination for license.

To put it another way, of the 500 matriculates at hospital schools of nursing in 1958, one third dropped out or flunked out and so did not graduate, one third failed the licensure examinations, and only one third were licensed.

This is the first of a series of articles dealing with modern nursing and nursing education. The second article will be published in an early number.—The Editor.

That is a tragic picture and reveals a tragic situation. What a waste of resources of all kinds and of teaching effort and what a loss of youthful years. That such a situation could come about warrants a demand for careful investigation to seek out the cause, or the causes, and attempt to find a remedy. I have found in recent literature only one discussion of the fall-out problem. John R. Thurston and his co-authors¹¹ state in an article published about a year ago:

Each year since 1954, there has been a national average of at least 32% withdrawal prior to graduation. This "fall-out" of approximately one third of the nation's student nurses annually, combined with the observation that many students failed to work up to capacity, has serious implications for the school, for the individual students, and for the public deprived of a sufficient quantity of qualified nurses to insure its adequate care when needed.

The authors discuss the usefulness of attempting to differentiate the "underachievers" from the "achievers" by some psychological testing. They then make a very cogent observation. They suggest that not only should differences in students be studied, but differences in schools of nursing as well. They say schools do differ in many different ways.

One may speculate regarding the causes involved in the progressively decreasing number of high school graduates who are electing to study nursing. There has been no scientific study reported that I can find. I shall list without discussion some probable causes which occur to me.

More exacting entrance requirements to schools of nursing; more rigid academic standards after admission; more failures on tests and examinations; less interest and excitement, particularly early in the course of training, because of increased hours of academic study and relatively late introduction of clinical teaching; less utilization of doctors of medicine in teaching, both in the classroom and on the wards; less opportunity for evenings off duty and so less time for outside recreation and especially for courting; increasing incidence of early marriage and of early child bearing; population movements, especially by young couples; loss of primary, rather idealistic motivation, based on inherent feminine instincts, and failure to accept as pertinent to their own interests and ambition statements of modern motivation for nurses such as those contained in nursing

school catalogues; lack of earnings during the training period, whether it be two, three, or four years as compared with the earnings of classmates who enter other occupations, whether it be clerical and stenographic work, salesladies in stores, textile workers, seamstresses, or what-not; the relatively low starting salaries of registered nurses; the longer work week, relatively, the necessity for night work, and weekend work, all of which have assumed greater importance because so many practicing nurses are married and have children; and finally the urge from many different sources, cultural, financial, industrial, and simply because it is the thing to do, that every high school graduate go to college.

I have at hand no comparative starting salaries or lifetime earning tables which would attempt to show the value of a college education. It is true that at one time when the work day was twelve hours and when much of the work as a student nurse was menial drudgery, the comparative pay of nurses was very low. Not so today. The average annual salary⁶ for a general duty nurse in South Carolina hospitals is \$3,336.00. The current average national salary at the general duty level is \$3,900.00. The beginning salary for a diploma graduate nurse in VA hospitals is \$4,700.00, and that for a degree graduate nurse is \$5,600.00. The differential between the annual salaries in VA hospitals for diploma school graduates and degree school graduates seem to confirm a belief in the mounting value of a college education. However, a nurse procurement officer in the VA system was recently quoted as saying he would not employ a degree school graduate until she had had one or two years of hospital experience.

However, I believe that the following statement made by P. R. Drucker, consulting economist, in a talk to the Harvard Business School Club, and reported in *Forbes Magazine* of November 1, 1963² is factual:

"For the individual, attending school does not necessarily result in education and may be the road to disillusion and dissatisfaction. For the corporation, it may be the road to labor trouble. For the nation, it may be the road to a return to violence in politics."

In line with Drucker's statement, it may be said of nurse education, that attempts to give the student a greater or less degree of liberal arts education may in many instances be the road to her disillusion and dissatisfaction.

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Deaths

DR. J. F. HIGHSMITH

Funeral services were held November 8 for Dr. J. F. Highsmith, Jr. at Myrtle Beach.

A native of Fayetteville, Dr. Highsmith was a son of the late Dr. J. F. Highsmith, Sr. and Mrs. Mary White Highsmith. He was born February 23, 1902.

He received his B. S. degree from the University of North Carolina and his M. D. degree from the University of Pennsylvania. Further studies included postgraduate work in Europe and at New York University.

He succeeded his father, founder and owner of Highsmith Hospital, as superintendent and upon the death of his brother, James DeCosta Highsmith, became chief of surgery there.

He was a fellow of the American College of Sur-

geons and a director of the North Carolina Medical Compensation Board. He moved to Myrtle Beach with his family in 1947.

DR. FRANK WOODRUFF

Dr. Frank B. Woodruff, 46, Greer physician, died at a Greenville hospital after an illness of four months.

He was a former resident of Woodruff and a graduate of the University of South Carolina and Medical College of South Carolina. He interned at Greenville General Hospital in 1944 and served his residency in obstetrics and gynecology from 1948-50.

Dr. Woodruff was a member of Greenville County Medical Society and the Southern, American, and Tri-State Medical Associations.

Book Reviews



FUNDAMENTALS OF BLOOD COAGULATION IN CLINICAL MEDICINE — by Cecil Hougie, M. D. First Edition. McGraw-Hill Book Company, Inc., New York, Toronto, London. 1963. Pp 284. Price—\$11.95.

For the practicing physician not particularly interested in hematology, this monograph affords an excellent review of the basic concept of bleeding diatheses. The many controversies as to terminology, pathogenesis or conflicting hypotheses are wisely omitted and the basic tenets presented. This allows for an understanding of the clinical diagnosis and laboratory findings of coagulation defects with a minimum of confusion.

The first part of the book is devoted to a review of blood coagulation and tests of clotting function. This is followed by a review of the pertinent aspects of a group of hemorrhagic disorders. The various anti-coagulants (dicumarol derivations and heparin)

are reviewed and the mode of action and clinical use are described. This is a particularly worth while section for the busy practitioner.

More unusual types of coagulation defects are also presented such as those associated with extra-corporeal circulation and the lack of fibrin stabilizing factor. These are important perhaps for the sake of completeness but do not add a great deal to the avowed purpose of the book.

Standard laboratory tests are described and the interpretation explained thus acting as a ready form of reference for technician or clinician.

This book can be recommended highly as a simple review of blood coagulation defects for the practicing physician, medical student or clinician.

Charlton deSaussure, M. D.

GYNECOLOGY. Langdon Parsons, M. D., and Sheldon Summers, M. D., W. B. Saunders and Co., Philadelphia and London, 1962—\$20.00.

Parsons and Summers borrowing Shakespeare's concept of the seven ages of man describe completely, vividly, and clearly the seven ages of woman. The book is well written, interesting to read and holds one's attention much better than the average

medical textbook. Most of the illustrations are excellent and the few tables are simple and clear.

In writing a book on gynecology and dividing it into the seven ages of woman, one would expect the largest division to be geriatric gynecology. This is not true since this is the shortest division, only 20 pages in length, whereas the "gynecologic problems of the young woman" (age 20-30) contains 314 pages. In defense it must be stated that the problems that one would expect to encounter in geriatric gynecology have been covered completely in previous chapters. The chapters are subdivided by subheadings and pertinent questions which the authors attempt to answer. This is eye-catching and tends to hold one's interest.

There are minor criticisms of this book, but these are related to the senior author's past training and experience. For example, cervical conization receives equal or less attention than does cervical biopsy.

Despite the minor criticisms that are due more to geographic location of the authors, this is an excellent book and should be in the library of every gynecologist and obstetrician, as well as any general practitioner interested in this specialty.

Lawrence L. Hester, Jr., M. D.

TEXTBOOK OF PATHOLOGY WITH CLINICAL APPLICATION. Stanley L. Robbins, M. D.; 2nd Edition. W. B. Saunders Company, Philadelphia & London, 1962; 1190 pp. \$19.00.

Textbooks of pathology generally fall into two categories—those designed chiefly for medical students and those designed chiefly for the practicing pathologist. Boyd's *Textbook of Pathology* is a good example of the first type. Anderson's *Pathology* represents the second type (even though it is required as a text in many medical schools, most students turn to Anderson's *Synopsis of Pathology* for practical usage.)

Robbins' *Textbook of Pathology* appears to be an excellent compromise between the two types of pathology texts. It is simple enough to be valuable to the student, and yet it contains enough detail to be useful to the practicing pathologist. Although this book is 161 pages shorter than the first edition, the pages are larger and represent essentially the same contents. Most of the really excellent photomicrographs and photographs of gross specimens from the first edition have been kept. Occasional pruning and polishing are found—generally with the addition of higher magnification photomicrographs. The print is large, uniform in size, and easy to read. As in the first edition, it is arranged two columns to a page. However, in this edition, the text is arranged in shorter paragraphs which makes reading simpler.

The writing is not the lyrical prose of Boyd, but it is simple enough for the student to understand and correlate without any sacrifice of essential details.

The additions and revisions of this book are unobtrusive and have not changed the format of the

original edition. Among the new paragraphs are several additions in microbiology including ECHO viruses, *Pasteurella multocida*, and *Mucormycosis*. A simple but valuable diagram has clarified the discussion on clotting mechanisms. Another well chosen diagram demonstrating the relative frequency of causes of death from poisoning has replaced a rather uninspiring table in the first edition. The chapters on Adrenal Physiology and Pathology and on Carbohydrate Metabolism have been enlarged. Other new paragraphs are devoted to Waldenström's macroglobulinemia, pulmonary alveolar proteinosis, Zollinger-Ellison Syndrome, and thyroiditis antibodies. Additional information is presented on the malabsorption syndrome, the types of biliary cirrhosis, and the most recently described histologic alterations in diabetic glomerular disease.

A number of new references have been added, but as Dr. Robbins properly states in his preface, "Due respect has been paid to recent literature and the advances of recent years—But all that is old is not bad, and some of the most significant and still unmatched writings that are included were published some years ago; these are included without apology and in recognition of their excellence."

In brief, this well written, well illustrated book represents a lucid introduction to pathology for the medical student and a valuable reference source for the practicing pathologist as well as other physicians.

Donald G. Kilgore, Jr., M. D.

THE PNEUMOCONIOSES. By A. J. Lanza, M. D., Editor. Grune and Stratton. New York. 1963. 154 pages, \$7.50.

This small volume presents in relatively brief form present day thinking with regard to the more important industrial dust diseases. Silicosis, asbestosis, diatomaceous earth pneumoconiosis, berylliosis and coal dust-induced diseases in the lungs are discussed. Limited comments regarding mixed dusts and benign pneumoconioses are included. Contributors include well known and recognized authorities in the field of industrial medicine. Material is presented from the point of view of the industrial physician and emphasis is placed on etiologic aspects, radiologic diagnosis, pathology and disability, from the industrial standpoint. Treatment is discussed but in no detail, and the clinical aspects of the various disorders are not emphasized. A chapter on the medicolegal aspects of the pneumoconioses is included. This section by the legal adviser of the Industrial Hygiene Foundation is a discussion of disability and compensation in industrial dust diseases and specific application of state laws as they apply in a number of states regarding these problems. As a source of general information regarding industrial dust diseases, the book is helpful but hardly adequate. Coverage from a bibliographical standpoint is not great and many aspects of the disorders presented are touched upon rather lightly.

Kelly T. McKee, M. D.

Riverside

—overlooking a broad, shimmering lake and the waters of the Ashley River.

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—2 nursing units (60-beds) for the long-term care of the elderly and chronically ill persons. Semi-private and private rooms.

Convalescent

—1 nursing unit (48-beds) for the short-term care of persons of any age convalescing from illnesses, accidents, surgery, dental extractions, and etc. Semi-private and private rooms.

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L. M. Harleston, Administrator
Mrs. Ethel Estridge, R. N.,
Director of Nursing Service.

RESULTS OF SURGERY FOR PEPTIC ULCER. (A Cooperative Study by Twelve Veterans Administration Hospitals) by R. W. Postlethwait, M. D. 1st Edition. W. B. Saunders Co., Philadelphia. 1963. Pp. 308. Price \$8.00.

Accurately recording the results of cooperative retrospective investigation covering an appreciable number of ulcer patients in an 11 year period beginning in 1947 by the surgeons of twelve Veterans Administration hospitals, this book uniquely offers an assessment of various current operations for peptic ulcer complications and objectively analyzes experiences and trends for future study. The sharp difference between the Veterans Hospital patients, who were mainly older males of lower socioeconomic brackets, and non-veteran Hospital patients imposes limitations on drawing meaningful analogies and interpolations with other populations.

The chapter topics of perforation, hemorrhage, obstruction, intractability, benign gastric ulcer, gastric resection, vagotomy, complications and deaths, marginal ulcer, and late gastrointestinal syndromes are individually covered by well trained surgeons participating in this study. Each writer offers brief personal opinions, definitions, current concepts, and comparative results from the literature along with a clearly detailed statistical analysis of the material relating to the subject considered. An attractive review of the issues concerned is provided by the author in the final summary chapter. This book provides helpful and interesting material for those concerned with the problems of peptic ulcer; particularly the surgical resident and practitioner. The stage is set for a cooperative study, now in progress, of duodenal ulcer procedures expected to alter gastroduodenal physiology favorably.

Harry B. Gregorie, M. D.

NO UNEMPLOYMENT BY YEAR 2000

The most striking feature about the U. S. Federal Government today is its size. The number of Federal employees has reached a peacetime high of 2.5 million. The cost of the Federal civilian payroll rose to \$15 billion in 1962 and is expected to total \$15.6 billion by June 30, 1964. Thirty states have more Federal employees than state employees. It is estimated that if present trends continue, every one of us will be working for the government by the year 2000. —Austin Smith, M. D., President Pharmaceutical Manufacturers Association, to Advertising Club of St. Louis, Mo., Feb. 6, 1963.

HANG TOGETHER—OR ELSE

It will be only by constant vigilance and by constant public education that a climate of competitive private enterprise, a climate nurturing incentive with the profit motive, can be maintained in both medicine and the drug industry. Both groups have so much in common in the struggle to prevent strangulation by Federal bureaucracy that it behooves each to support the other. —John S. DeTar, M. D., in *Medical Economics*, Jan. 28, 1963.

in virtually all diarrheas...prompt symptomatic control

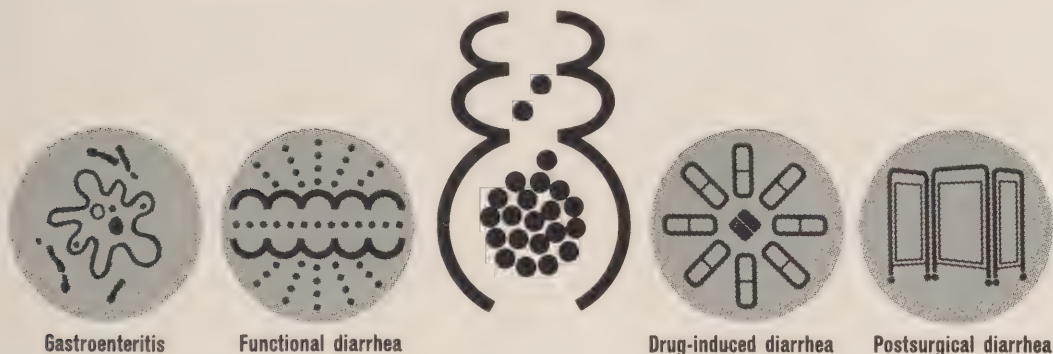
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TABLETS / LIQUID—Each tablet and each 5 cc. of liquid contains:

diphenoxylate hydrochloride . . . 2.5 mg.

(Warning: May be habit forming)

atropine sulfate 0.025 mg.



Lomotil controls the basic physiologic dysfunction in diarrhea—excessive propulsive motility. Pharmacologic evidence indicates that it does so by directly inhibiting propulsive movements of the intestines. This direct, well-localized activity controls diarrheas of widely varied origin and does so promptly, conveniently and economically.

The relatively few conditions in which Lomotil has given less than satisfactory control have been, for the most part, those such as severe ulcerative colitis in which too little anatomic or functional capacity of the intestines remains for the motility-lowering action of Lomotil to have effect.

It should be noted, however, that Lomotil has proved highly useful in mild to moderate ulcerative colitis and in several other refractory forms of diarrhea.

The recommended initial adult dosage is two tablets (2.5 mg. each) three or four times daily, reduced to meet the requirements of each patient as soon as the diarrhea is controlled. Maintenance dosage may be as low as two tablets daily. *Children's* daily dosage (in divided doses) varies from 3 mg. for a child of 3 to 6 months to 10 mg. for one 8 to 12 years of age. Lomotil is an exempt narcotic; its abuse liability is low and comparable to that of codeine. Recommended dosages should not be exceeded. Side effects are relatively uncommon but among those reported are gastrointestinal irritation, sedation, dizziness, cutaneous manifestations, restlessness and insomnia. Lomotil should be used with caution in patients with impaired liver function and in patients taking addicting drugs or barbiturates. Lomotil is a brand of diphenoxylate hydrochloride with atropine sulfate; the subtherapeutic amount of atropine is added to discourage deliberate overdosage.

Research in the Service of Medicine

SEARLE

CURRENT THERAPY. Edited by Howard F. Conn, M. D. W. B. Saunders Co., Philadelphia, 1962. 788 Pages. \$12.50.

This edition of current therapy has been largely rewritten and revised and once again is an extremely helpful reference work for the practicing physician. The ten consulting editors have done an excellent job of presenting succinctly a method of treatment for hundreds of different diseases. Of necessity, this becomes quite didactic and represents only one method of therapy, where there may be many possible. Nevertheless, it provides a ready reference for effective treatment until more detailed studies are done.

The "normal laboratory values" are very helpful and easily accessible inside the front and back covers of the book. The appendices include pediatric dosage scales, explanations of measurements used in treatment with parenteral fluids such as milliequivalents and milliosmoles and relationship between the metric and apothecaries systems.

This book can be highly recommended to the general practitioner as a guide source of information for accepted forms of therapy as well as interpreting laboratory reports.

Charlton deSaussure, M. D.

MEDICAL STATE BOARD QUESTIONS AND ANSWERS. By Harrison F. Flippin, M. D. W. B. Saunders. Philadelphia. 1962. \$9.50.

This tenth edition provides an excellent method of review for medical state board examinations, and to no lesser degree, similarly provides a concise practical specialty review for the intern rotating through the various services. The subject material is presented in

a most practical and absorbing fashion and one does not readily become bored or lost in insignificant detail. However, there does appear to be some laxity as regards close scrutiny of answers in relation to errors, omissions and needed revisions. The section on Obstetrics and Gynecology is truly outstanding in all respects. I am of the opinion that the section on Medical Jurisprudence should be greatly expanded. Nonetheless, this volume more than adequately fulfills the stated purpose and I have and will continue to profit from it.

J. D. Morgan, M. D.

MAN AND HIS FUTURE, edited by Gordon Wolstenholme. Little, Brown and Company, Boston, Toronto, 1963. Pp. 410. Price \$6.00.

This is a fascinating book which records a lengthy discussion by top-level scientists who attempt to project future developments in the life of man. The participants include such people as Julian Huxley, J. B. S. Haldane, Brock Chisholm, Albert Szent-Gyorgyi and others of equivalent status. It includes consideration of world resources and population, social groups, man's relation to his environment, machines and societies, the promise of medical science, future of infectious and malignant diseases and a number of other topics of a related nature. The preparation of the text has been done with the lay reader in mind but the material presented is of tremendous interest to any reader. The book stirs the imagination and offers pregnant thoughts on biological research with its possible interference with "natural processes" and its potentialities for the future. It can be highly recommended for the interest of its subject matter and the manner of expression.

JIW

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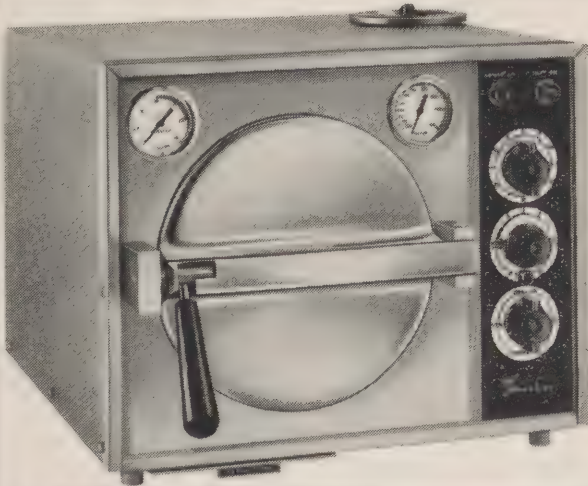
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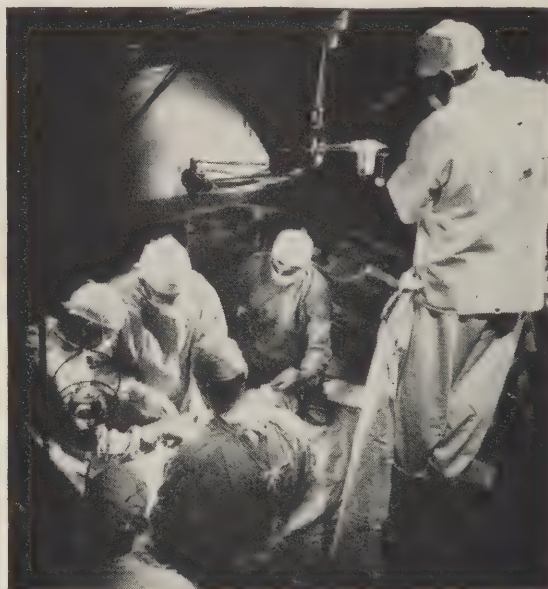
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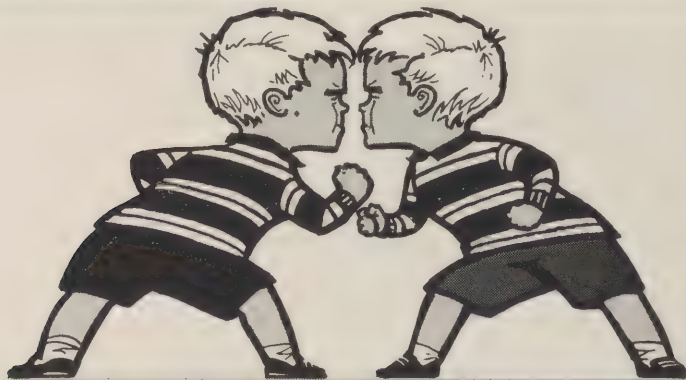
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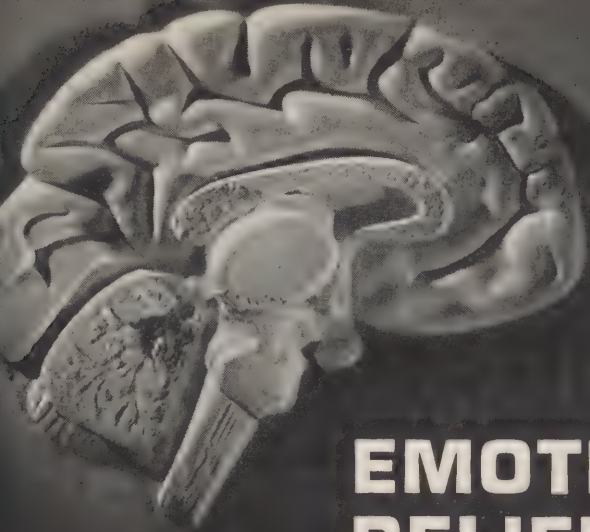
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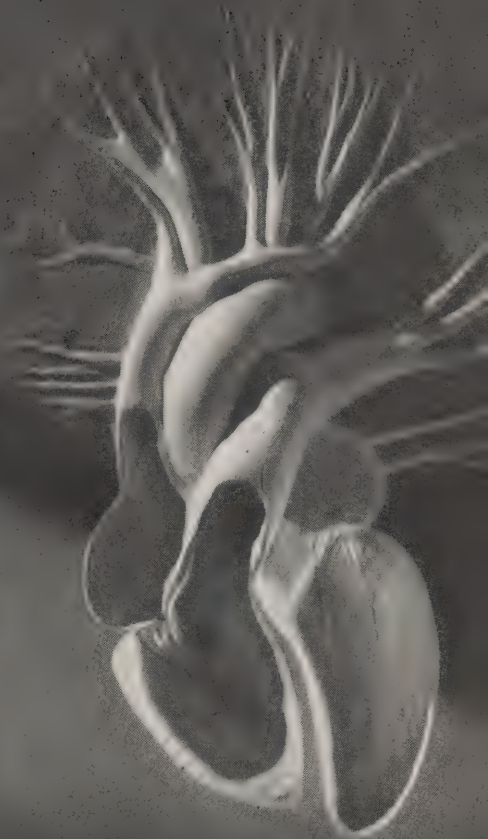


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Side effects: 'Meprospan' (meprobamate, sustained release) is remarkably free of untoward reactions. Daytime drowsiness has not been reported. Rare allergic or idiosyncratic reactions may occur, generally developing after 1-4 doses of the drug.

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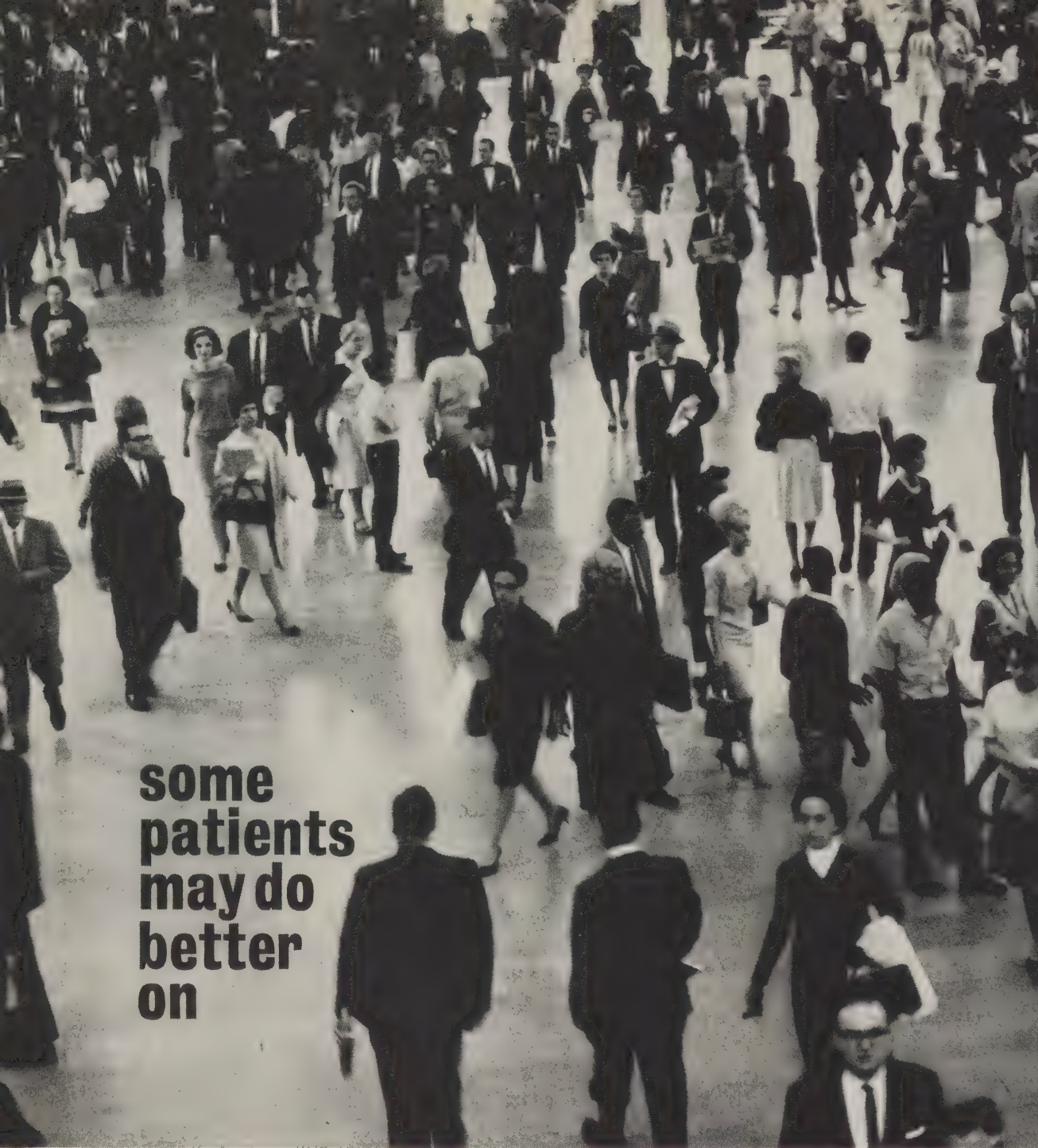
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Exempt Narcotic.

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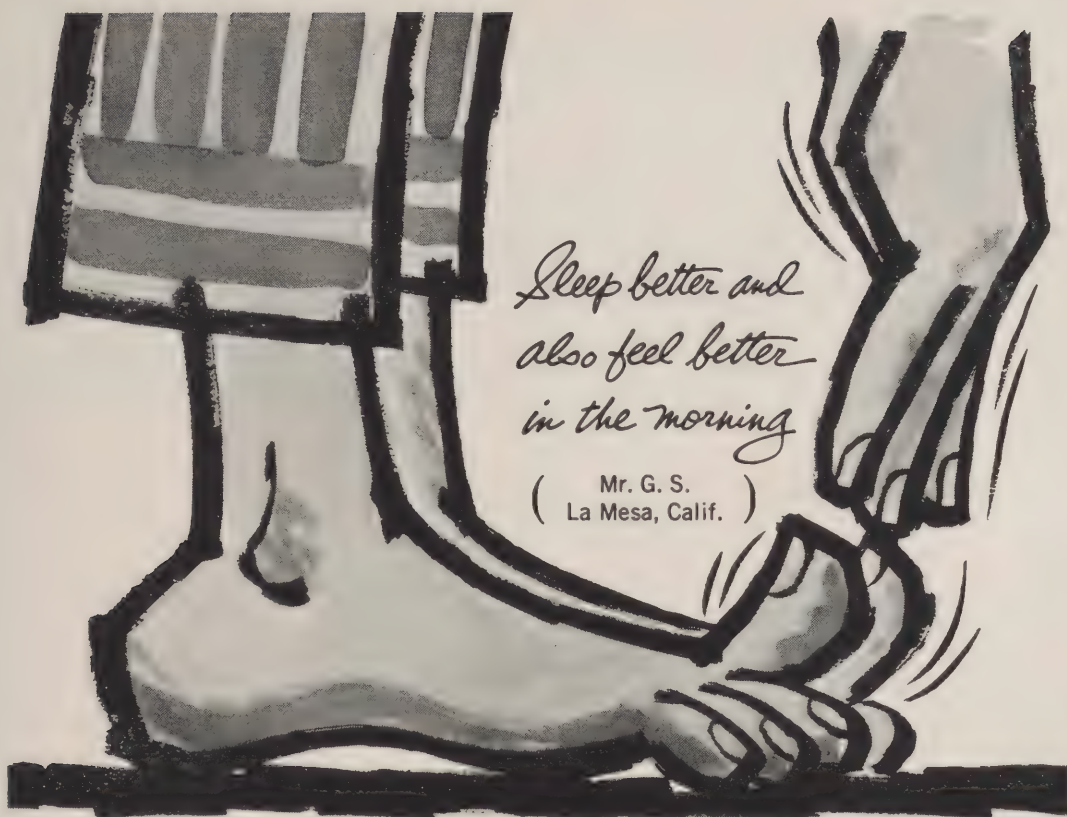
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'Sudafed'® brand Pseudoephedrine Hydrochloride...	20 mg.
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Phenacetin.....	150 mg.
Aspirin.....	200 mg.
Caffeine.....	30 mg.

*Warning—may be habit forming

'Emprazil-C' Tablets are available on prescription only.

Dosage: Adults and children over 12 years—1 or 2 tablets—3 times daily as required. Children 6 to 12 years—1 tablet—3 times daily as required. **Caution:** While pseudoephedrine is virtually without pressor effect in normotensive patients, it should be used with caution in hypertension. Also, while chlorcyclizine has a low incidence of antihistaminic drowsiness, the usual precautions should be observed. **Supplied:** Bottles of 100 tablets.

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who were the “untreatables”?

From their inception with cortisone, to the present-day variants of the steroid molecule, the corticosteroids have presented a therapeutic paradox. The beneficial action against inflammation and allergy as well as several undesirable metabolic effects are all, apparently, the results of the same basic physiologic action.¹

Some of these associated metabolic reactions made it risky or otherwise undesirable to treat with steroids large numbers of patients in various categories who would otherwise have benefited from such management. These “untreatables” were overweight, had cardiac disease, hypertension, or pulmonary fibrosis associated with congestive heart failure. Also in this category were those patients whose emotional symptoms were aggravated by earlier steroids.

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Side Effects. Since it may, under some circumstances, produce any of the unwanted effects common to all cortisone-like drugs, discrimination should always be exercised in administering ARISTOCORT® Triamcinolone. Any of the Cushingoid effects are possible, as are purpura, G.I. ulceration, increased intracranial pressure and subcapsular cataract. Corticosteroids generally may mask outward signs of bacterial or viral infections. Catabolic effects to watch for include muscle weakness and osteoporosis. Weight loss may occur early in treatment but is usually self-limiting.

Contraindications. While the only absolute contraindications are tuberculosis and herpes simplex, there are some relative contraindications (peptic ulcer, glomerulonephritis, myasthenia gravis, osteoporosis, fresh intestinal anastomoses, diverticulitis, thrombophlebitis, psychic disturbance, pregnancy, infection) to weigh against expected benefits.

While no steroid can *cure* a susceptible disorder, many patients who would otherwise be confined in a state of invalidism have, on ARISTOCORT® Triamcinolone, been able to pursue active, useful lives.

References: 1. Levine, R.: Rationale for the Use of Adrenal Steroids, Paper presented at Annual Convention, Medical Society of the State of New York, New York, May 13-17, 1963. 2. Hollander, J. L.: Clinical Use of Dexamethasone. *JAMA* 172:306 (Jan. 23) 1960. 3. Boland, E. W.: Chemically Modified Adrenocortical Steroids. *JAMA* 174:835 (Oct. 15) 1960. 4. McGavack, T. H.: The Newer Synthetic Adrenocortical Steroids in Therapy. *Nebraska Med. J.* 44:377 (Aug.) 1959. 5. Freyberg, R. H.; Berntsen, C. A., Jr., and Hellman, L.: Further Experiences with Δ^1 , 9 Alpha Fluoro, 16 Alpha Hydroxyhydrocortisone (Triamcinolone) in Treatment of Patients with Rheumatoid Arthritis. *Arthritis Rheum.* 1:215 (June) 1958. 6. Cahn, M. M. and Levy, E. J.: Triamcinolone in the Treatment of Dermatoses. *Amer. Practit.* 10:993 (June) 1959. 7. AMA Council on Drugs: New and Nonofficial Drugs. *JAMA* 169:255 (Jan. 17) 1959. 8. McGavack, T. H.; Kao, K.-Y. T.; Leake, D. A.; Bauer, H. G., and Berger, H. E.: Clinical Experiences with Triamcinolone in Elderly Men. *Amer. J. Med. Sci.* 236:720 (Dec.) 1958. 9. Fernandez-Herlihy, L.: III. Use and Abuse of Corticosteroid Therapy—The Structure and Biologic Activity of the Corticosteroid Hormones and ACTH. *Med. Clin. N. Amer.* 44:509 (Mar.) 1960. 10. McGavack, T. H.: Triamcinolone: A Potent Anti-inflammatory Sodium Excreting Adrenosteroid. *Clin. Med.* 6:997 (June) 1959.

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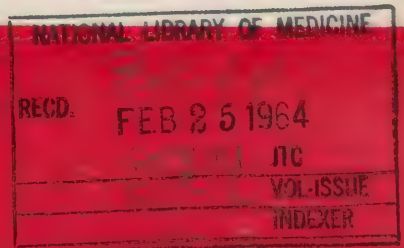
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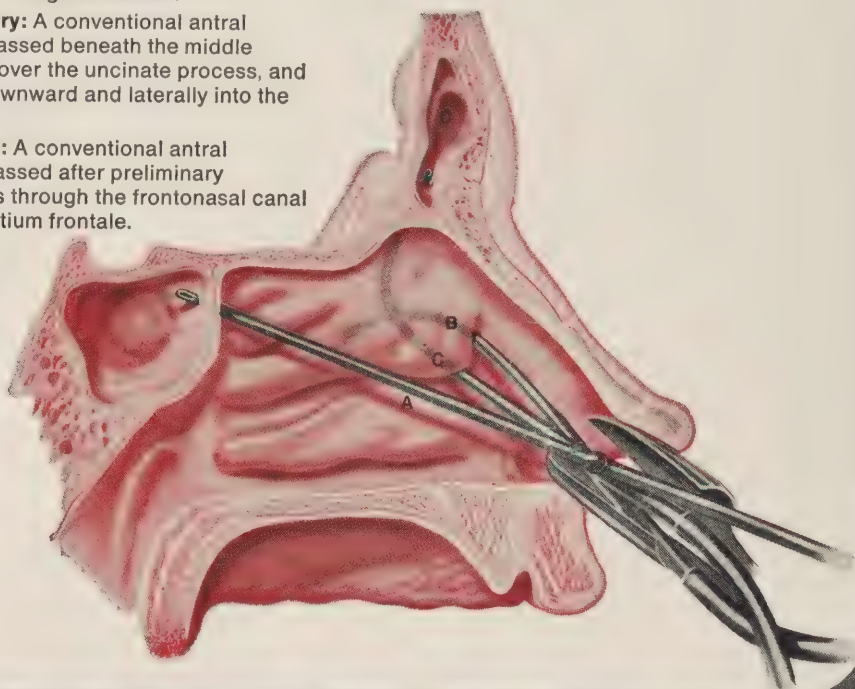
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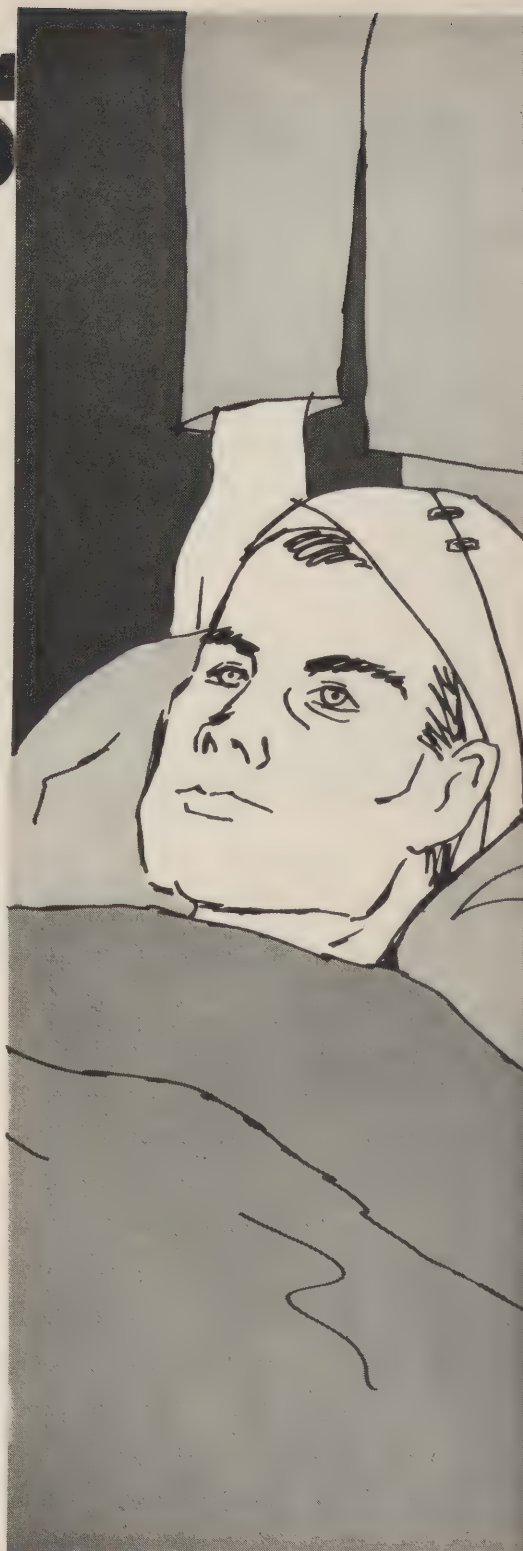
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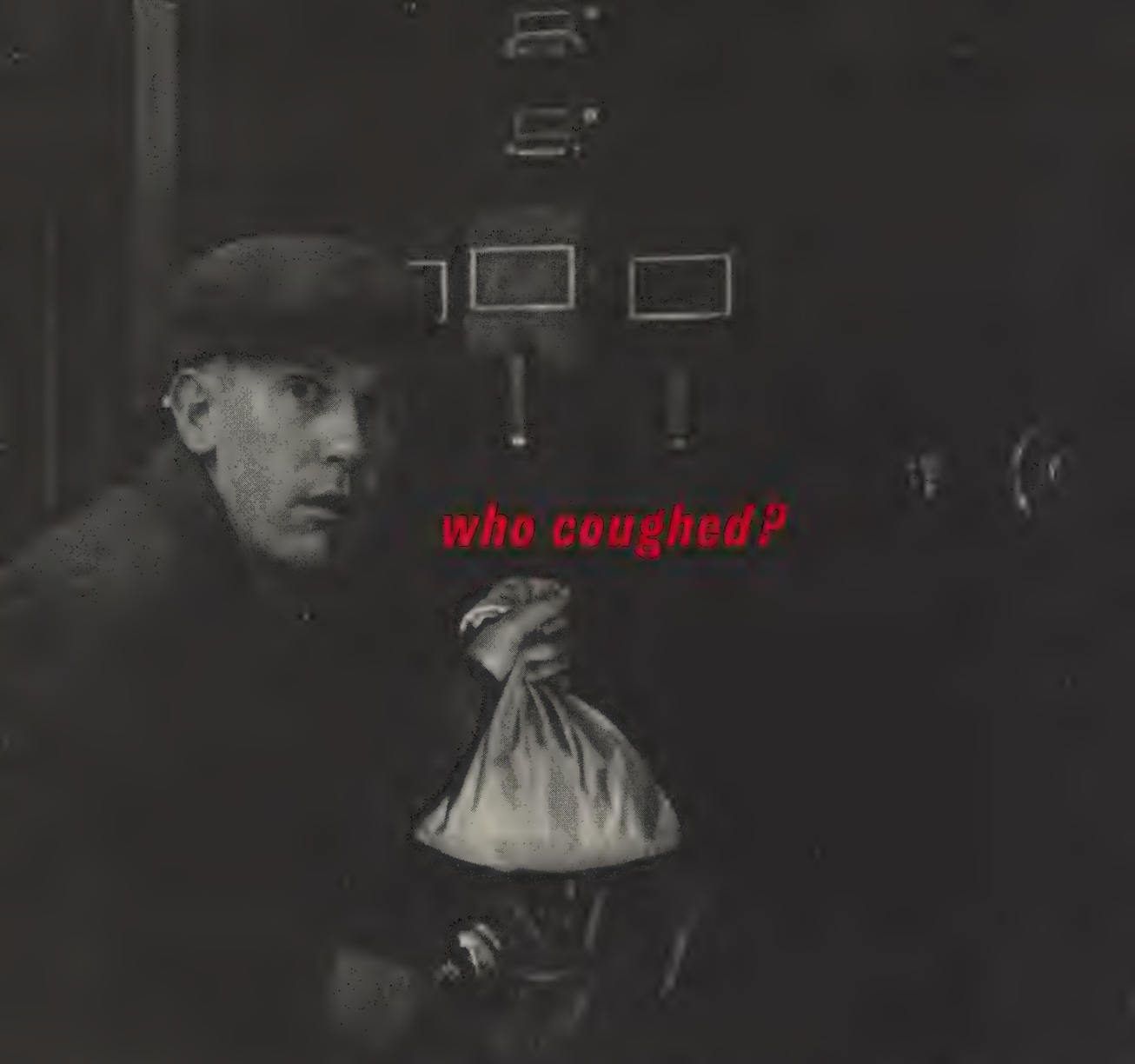
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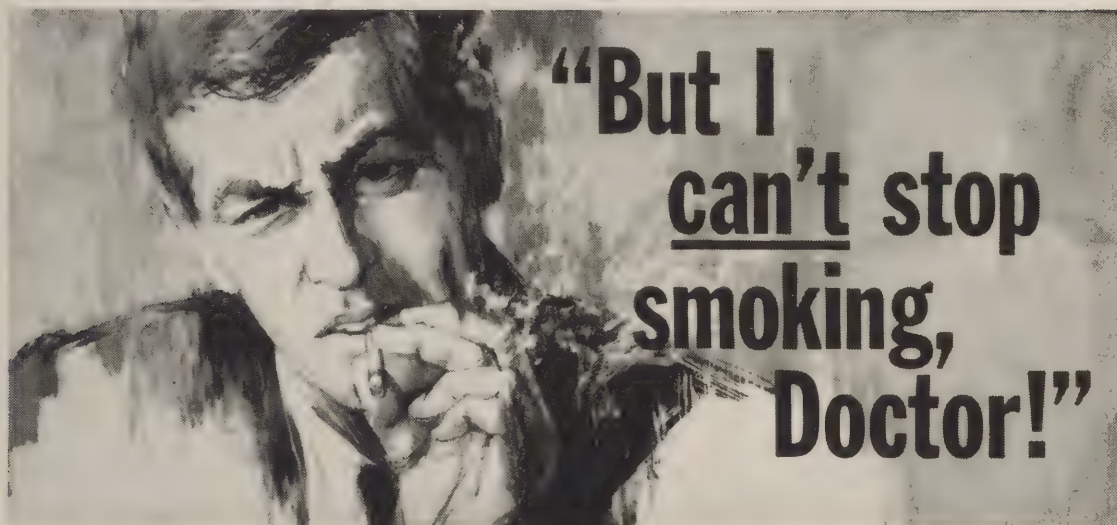
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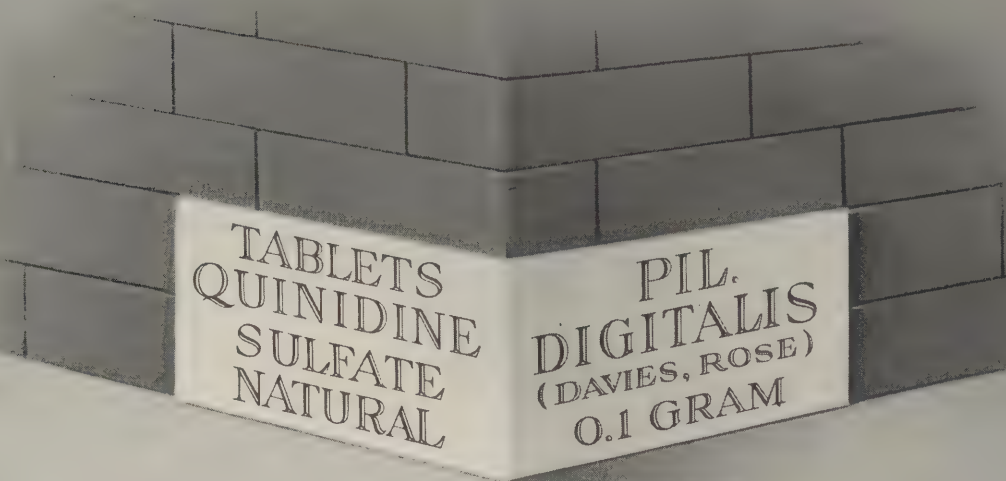
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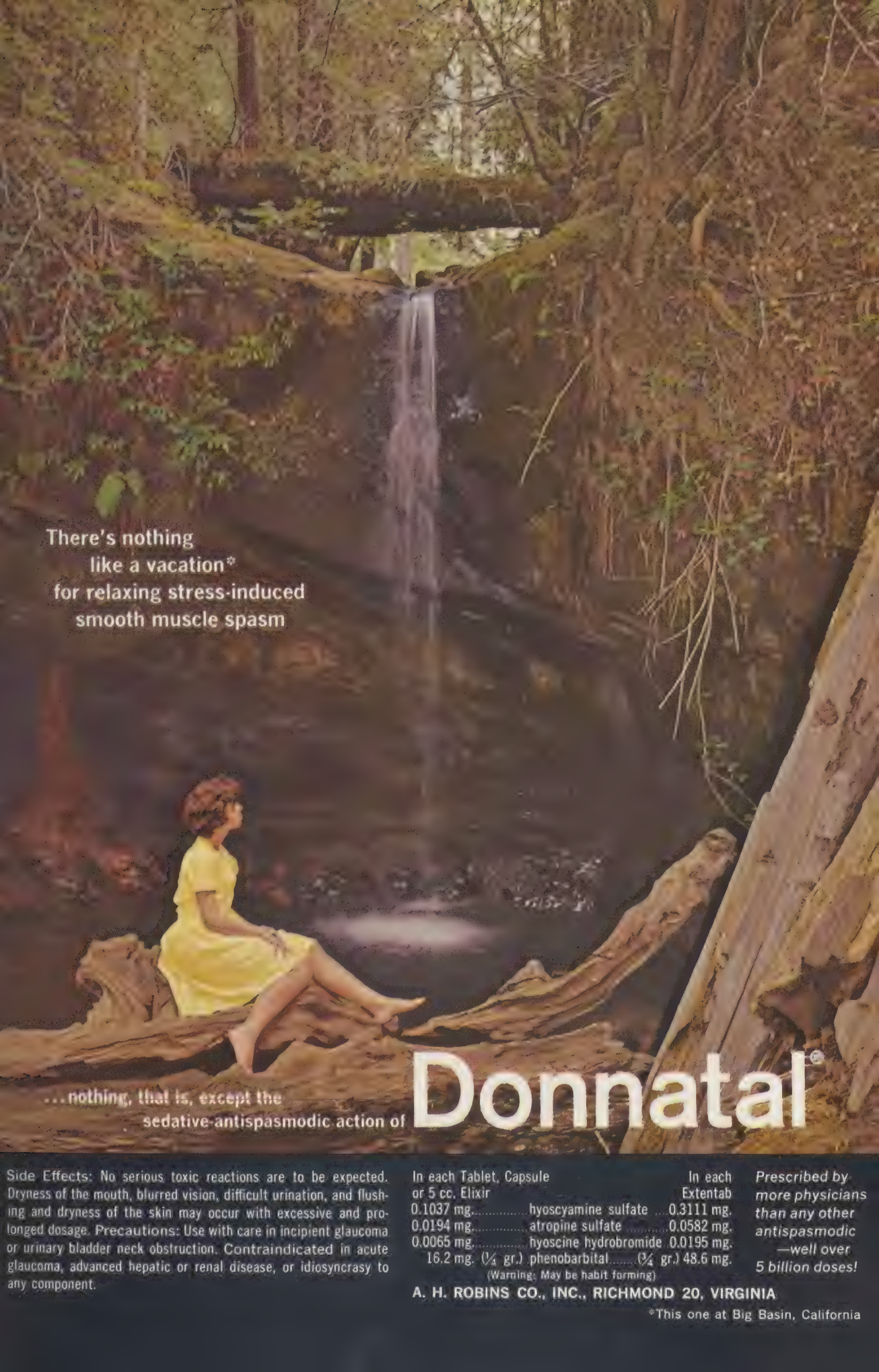


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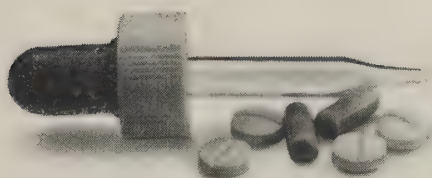
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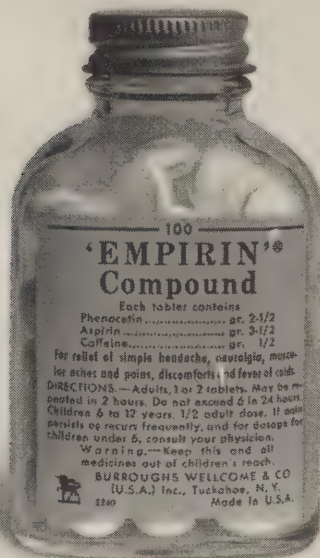
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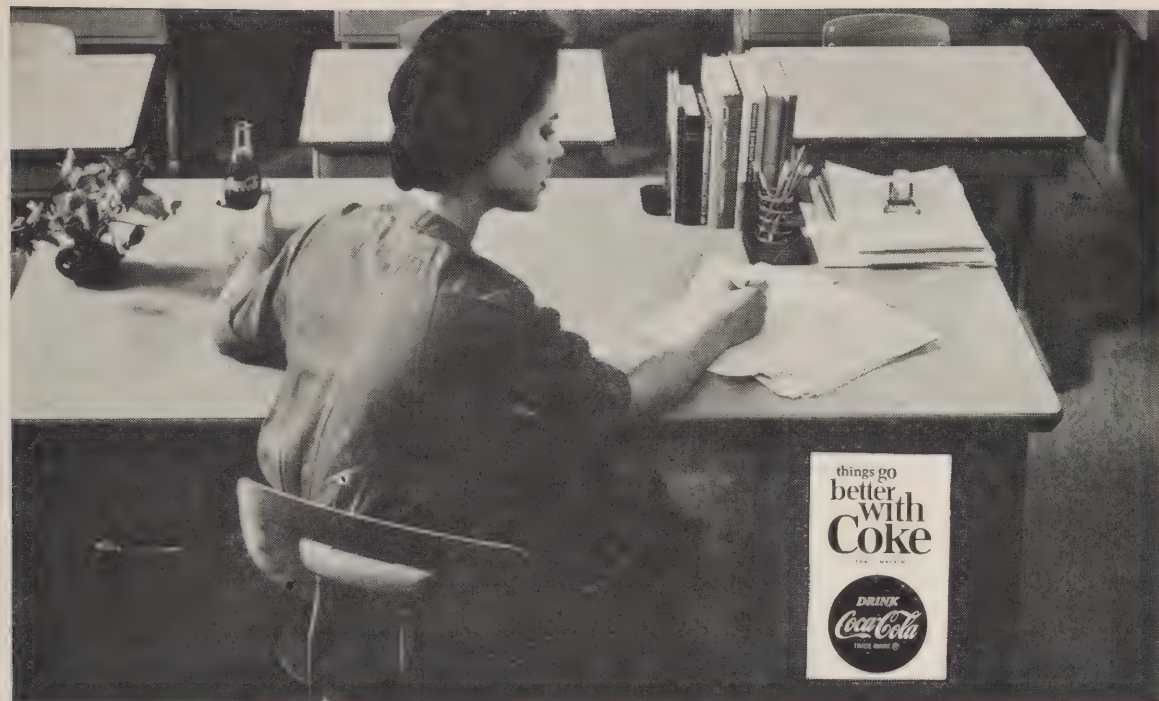
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The Journal

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VOLUME 60

February, 1964

NUMBER 2

BITES BY POISONOUS SNAKES IN SOUTH CAROLINA

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Poisonous snakebites are a medical problem of considerable magnitude in the South Atlantic States. This is reflected by the fact that three of the South Atlantic States (Georgia, Florida, South Carolina) rank among the six states with the highest snakebite death rates per 1,000,000 population in the United States.¹ These states are: Arizona (0.63), Georgia (0.60), Florida (0.54), Alabama (0.45), South Carolina (0.31), and Texas (0.27). During the ten year period, 1950-1959, there were seven fatalities from poisonous snakebites in South Carolina. It seemed worthwhile, therefore, to study bites by poisonous snakes in South Carolina in detail. The purpose of this study is three-fold: (1) to describe the epidemiology of poisonous snakebites in South Carolina; (2) to relate some medical findings associated with these snakebite cases; and (3) to review briefly current concepts of snakebite treatment.

Poisonous Snakes

According to Conant,² the following species and sub-species of poisonous snakes are in-

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This investigation was supported in part by Public Health Service Research Grant GM 11268-02 from the Division of General Medical Sciences, Public Health Service.

digenous to South Carolina: the eastern diamond-back rattlesnake (*Crotalus adamanteus*), the timber rattlesnake (*Crotalus horridus horridus*), the canebrake rattlesnake (*Crotalus horridus atricaudatus*), the Carolina pigmy rattlesnake (*Sistrurus miliarius miliarius*), the dusky pigmy rattlesnake (*Sistrurus miliarius barbouri*), the northern copperhead (*Agkistrodon contortrix mokeson*), the southern copperhead (*Agkistrodon contortrix contortrix*), the eastern cottonmouth moccasin (*Agkistrodon piscivorus piscivorus*), and the eastern coral snake (*Micrurus fulvius fulvius*). Thus, there are nine species or sub-species of poisonous snakes in the State.

South Carolina has each of the four major kinds of venomous snakes found in the United States. With the exception of the coral snake, they are all pit vipers. They are so named because of a characteristic pit which is located between the eye and nostril on each side of the body. Pit vipers also are identified by elliptical pupils and by two well-developed fangs which protrude from the maxillae when the snake's mouth is opened. Rattlesnakes have rattles which are attached to their tails. Copperheads, cottonmouth moccasins and harmless snakes do not have rattles. The copperhead has a reddish-brown head and dark,

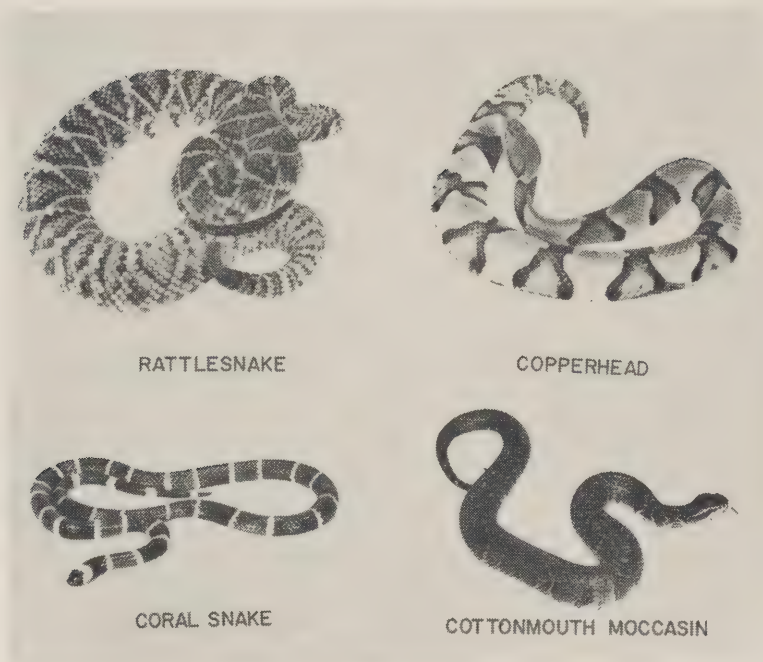


FIGURE 1

hourglass-shaped crossbands on the body. Harmless snakes do not have facial pits, they have round rather than elliptical pupils, and while they have teeth, they lack fangs.

The coral snake is a beautifully colored small snake which has broad rings of scarlet and black separated by narrow rings of yellow. An easy way to remember this is, "red next to yellow will kill a fellow." It is important to remember that the coral snake's *snout is always black*. Several harmless snakes resemble coral snakes but their snouts are usually grey or red. Coral snakes have round pupils and they lack facial pits. See Figure 1 for photographs of poisonous snakes of South Carolina.

Methods of Study

A questionnaire and letter explaining the purpose of this study were mailed to a "selected" group of South Carolina hospitals listed in *Hospitals* (Journal of the American Hospital Association) Guide Issue, Aug. 1, 1960. The hospitals selected for this study were general hospitals, children's hospitals and college infirmaries. Army, Navy, Coast Guard, Public Health Service, Air Force and Veterans Administration hospitals also were sent questionnaires. Maternity, tuberculosis and mental hospitals were omitted as they would not be expected to treat snakebite victims. A total of 69 South Carolina hospitals com-

prise the study group. Each hospital was requested to report all in-patients admitted to the hospital for snakebite treatment during 1958 and 1959.

Most hospitals do not code and tabulate the diagnoses of emergency room and out-patient clinic visits. Since some snakebite victims are not admitted to the hospital as in-patients, it seemed essential to ask a sample of practicing physicians how many snakebite victims they treated on both an out-patient (office, home, emergency room, etc.) and on an in-patient basis. Previous surveys,^{3, 4} have shown that most people with venomous snakebites are treated by general practitioners, surgeons, internists, pediatricians and orthopedic surgeons. Therefore, a random of one-third of all the South Carolina physicians in these categories of practice who were listed in the AMA American Medical Directory were sent questionnaires.

Death certificates for fatal snakebite cases were obtained from the South Carolina State Board of Health.

Results

This study is based on questionnaires returned by 66 (96 per cent) of 69 hospitals in South Carolina. It is supplemented by questionnaires returned by 188 (72 per cent) of 261 medical practitioners in the State and by three snakebite death certificates provided by the South Carolina State Board of Health.

Incidence—South Carolina hospitals reported that 144 in-patients were treated for poisonous snakebites during 1958 and 1959. There were 69 cases reported for 1958 and

POISONOUS SNAKES

75 cases for 1959—an average of 72 cases per year. Of the 144 cases reported by hospitals, 90 cases were reported in detail and only numbers of bites were reported for 54 cases. With the exception of estimating the incidence of poisonous snakebites for the State, all of the analyses in this study were based on the 90 hospital in-patient cases reported in detail.

Physicians' reports, when adjusted to account for all South Carolina physicians in the practice categories mentioned, indicated that approximately 104 in-patients and 80 out-patients were treated for snakebite accidents each year. The difference between the average of 72 in-patients reported by hospitals and the 104 in-patients physicians estimated they treated annually can be explained, in part, by the following facts: (1) three hospitals did not participate in the study; (2) eight hospitals which participated gave only estimated numbers of bites treated; (3) two counties from which physicians reported bites did not have hospitals listed in Hospital Guide Issue; and (4) there was evidence of under-reporting snakebite in-patients from four hospitals.

Physicians in counties from which hospitals also reported snakebite cases estimated that they treated 93 in-patients and 56 out-patients per year. Their estimate of 93 in-patients treated is not much higher than the average of 72 in-patients reported by hospitals, especially when one considers that some hospitals under-reported in-patient cases.

Physicians from counties which did not have a hospital listed in *Hospitals Guide Issue* reported treating eight out-patients for poisonous snakebites. Physicians reported treating 11 in-patients and 16 out-patients in several counties from which hospitals listed in *Hospitals Guide Issue* reported no bites treated.

Taking all of these various reports into consideration, we estimate that approximately 184 people (104 in-patients and 80 out-patients) are treated for poisonous snakebites each year in South Carolina. This provides

an incidence of 7.72 snakebites per 100,000 population per year.

Geopathology—The geographical distribution of snakebites reported in South Carolina during 1958 and 1959 may be seen in Figure 2. The lightly shaded counties are those from

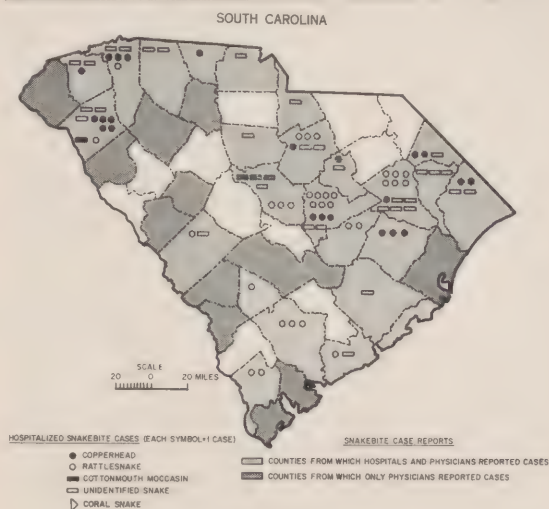


FIGURE 2

which hospitals reported in-patients treated for snakebites. An appropriate symbol is used to mark each hospitalized patient who was bitten by a specific kind of snake. The darker shaded counties are those counties from which physicians reported snakebite cases, but from which no cases were reported by hospitals.

Of 90 people entering hospitals for snakebite treatment, 31 (34 per cent) were bitten by rattlesnakes, 23 (26 per cent) by copperheads, 4 (4 per cent) by cottonmouth moccasins, and 32 (36 per cent) by unidentified poisonous snakes. Two of the rattlesnakes inflicting bites were identified as eastern diamondback rattlesnakes (*C. adamanteus*) and one was a timber rattlesnake (*C. horridus horridus*). The species was not stated for the other rattlesnakes inflicting bites. No coral snake bites were reported.

Figure 2 shows that copperhead bites were most frequent in northwestern South Carolina around Greenville, Pickens and Anderson Counties and in the northcentral and the northeastern parts of the State. However,

copperheads have a statewide distribution. Cottonmouth moccasin bites were reported from Anderson and Richland Counties. The cottonmouth's range is all parts of the State except for the northwestern corner. Anderson County adjoins this range, and most likely this was a bite by a real cottonmouth moccasin. Although rattlesnake bites were reported from all areas of the state, by far the largest number of bites were reported from the eastern part of South Carolina. This is rattlesnake country. It is inhabited by the diamondback rattlesnake, the canebrake rattlesnake, a few timber rattlesnakes, and pigmy rattlesnakes.

There were four multi-county foci where poisonous snakebites were especially frequent in South Carolina. These are: (1) the Greenville, Spartanburg, Pickens, Anderson County area in northwestern South Carolina, (2) the Kershaw, Richland, Sumter, Lee, Clarendon County area in the northcentral part of the State; (3) the Florence, Williamsburg, Dillon, Marion, Horry County area in northeastern South Carolina; and (4) the Bamberg, Colleton, Jasper, Charleston, Berkeley County area in southeastern South Carolina. These counties are surrounded by counties from which physicians reported additional bites but from which hospitals did not report bites. Hospitals in the southwestern part of the State reported the lowest number of bites, although physicians indicated that some snakebites do occur there.

Temporal Relationships—The monthly distribution of poisonous snakebites is shown in Table 1. There were no cases reported for the colder months of the year—November, December, January and February. During the colder months of the year snakes are usually inactive or hibernating. One case was reported for March. Eighty-nine (99 per cent) of the 90 cases occurred from April through October. July, August and September were the peak months. This striking seasonal pattern of bites coincides with the time that snakes are most abundant and active and with the time that people have greater exposure

due to out-of-doors occupations and recreation. Similar "seasonal epidemics" of poisonous snakebites have been reported from Florida and New England.^{3, 4}

TABLE 1
SEASONAL DISTRIBUTION OF POISONOUS
SNAKEBITES IN SOUTH CAROLINA,
1958 AND 1959

Month	No. Bites	Month	No. Bites
January	0	July	20
February	0	August	14
March	1	September	22
April	5	October	8
May	9	November	0
June	11	December	0

Accidents resulting from snakebites were rather evenly distributed throughout the day from 6:00 A. M. through 8:59 P. M. The number of bites by three hour periods of time were: 6:00-9:00 A. M., 10 bites; 9:00-12:00 A. M., 15 bites; 12:00 noon-3:00 P. M., 18 bites; 3:00-6:00 P. M., 17 bites; 6:00-9:00 P. M., 18 bites; 9:00-12:00 P. M., 4 bites. No bites were reported from midnight through 6:00 A. M. In eight cases the time of the bite accident was not stated.

Bite Victims—There were 39 white males, 13 white females, 25 non-white males and 13 non-white females admitted to South Carolina hospitals for snakebite treatment during 1958 and 1959. All of the non-whites were Negroes. Using the 1960 census of the population of South Carolina, the bite rates per 100,000 population were: 6.25 for non-white males, 5.03 for white males, 3.01 for non-white females, and 1.68 for white females. Thus non-whites had higher snakebite rates than whites and males had higher rates than females.

The age distribution of South Carolina snakebite victims is shown in Table 2. The largest number of snakebites happened to children and young adults 10-19 years of age (27 bites) and to those 0-9 years of age (23 bites). Indeed, 56 per cent of all snakebites were inflicted on children and youths less than 20 years of age. Age-specific bite rates are much more meaningful since they

take into account the population at risk in a particular age group. The highest biannual bite rates per 100,000 population were: 10-19 years of age (5.42); 20-29 years of age (4.14); and 0-9 years of age (3.96). The lowest bite rate was for the 70 year and over age group.

TABLE 2
AGE DISTRIBUTION OF HOSPITALIZED SNAKEBITE
VICTIMS IN SOUTH CAROLINA,
1958 AND 1959

Age Group (years)	Population at Risk*	No. Bites	Rate per 100,000**
0 - 9	581,198	23	3.96
10 - 19	497,749	27	5.42
20 - 29	314,159	13	4.14
30 - 39	307,106	10	3.26
40 - 49	271,929	7	2.57
50 - 59	192,468	6	3.12
60 - 69	128,047	3	2.34
70 or more	89,938	1	1.11

An analysis of the occupations of the patients showed that 46 were children, 15 were farm laborers, 5 were laborers other than farm laborers, 5 were housewives, 2 were professional engineers, one was a craftsman, and one was unemployed. The occupation was not coded for the remaining bite victims.

Activity and Place—Twelve bites happened while children were playing outside, three in their own yard and nine elsewhere. Nine additional people were bitten while walking or working in their yards. Eleven people were bitten while working on a farm or ranch, four while deliberately handling a poisonous snake, four while hunting or fishing, and three while engaged in other forms of recreation. Three people were bitten while picking up logs or lumber, two while participating in Army maneuvers, one while walking near a highway, and one while sleeping in bed at home. The activity was not coded for the remaining patients.

The place where the bite accident happened is closely related to the activity when bitten. The largest number of snakebites, 12,

happened right in the patient's own yard. Eleven people were bitten on a farm away from the house. Nine people were in the woods, seven were in or near water, seven were in a field away from the house, four were in a field adjoining the house, four were in or under a building or house, and one was on or near a highway. Of the four people bitten while in or under a building, a carpenter was bitten while crawling under a house, a child was bitten while sleeping in the house, one person was bitten while handling a snake inside the house, and one sales person was bitten on the loading dock of a supermarket. The place where the bite happened was not recorded for the remaining patients.

Site and Severity—The anatomical sites on human beings where poisonous snakes inflicted their bites are shown in Table 3.

TABLE 3
ANATOMICAL SITES OF BITES INFLICTED BY
VENOMOUS SNAKES IN SOUTH CAROLINA,
1958 AND 1959

Anatomical Site of Bite	Side of Body		Total No. of Bites
	Right	Left	
Head, face & neck	2	0	2
Trunk, front	0	0	0
Trunk, back	1	0	1
Arm	0	0	0
Forearm	3	5	8
Hand	7	4	11
Fingers	13	9	22
Thigh	0	0	0
Leg & ankle	12	6	18
Foot	9	11	20
Toes	2	4	6
Not stated	—	—	2

Eighty-five (94 per cent) of the bites were on the extremities, 41 (45 per cent) on the upper extremities and 44 (49 per cent) on the lower extremities. The fingers and hands were the parts most often bitten on the upper extremities. The feet and legs, including the ankles, were the parts most frequently bitten on the lower extremities. A two year old child was bitten on the lower lip while playing in a field near the house, and a 13 year old youth was bitten on the upper lip while loading hay. A woman was bitten on

*Based on the 1960 Census of the Population of South Carolina.

**These rates are based only on hospital patients on whom information was available.

the lumbar area of her back when she picked up a basket of corn which contained a rattlesnake. In two cases the site of the bite was not listed.

A modification of the clinical classification of pit viper venenations by Wood, Hoback and Green⁵ was used to determine the severity of bites. Bites were classified as follows:

- Grade 0 —*No venenation.* Fang or tooth marks, minimal pain, less than 1 inch of surrounding edema & erythema. No systemic involvement.
- Grade I —*Minimal venenation.* Fang or tooth marks, severe pain, 1-5 inches of surrounding edema & erythema in first 12 hours after bite. No systemic involvement usually present.
- Grade II —*Moderate venenation.* Fang or tooth marks, severe pain, 6-12 inches of surrounding edema & erythema in first 12 hours after bite, systemic involvement may be present—nausea, vomiting, giddiness, shock or neurotoxic symptoms.
- Grade III —*Severe venenation.* Fang or tooth marks, severe pain, more than 12 inches of surrounding edema & erythema in first 12 hours after bite, systemic involvement usually present as in Grade II.

The severity of venenation (venom poisoning) was classified for 81 of the 90 hospitalized cases. Of these 81 snakebite cases, 11 (13 per cent) were Grade 0, 38 (47 per cent) were Grade I, 21 (26 per cent) were Grade II, and 11 (14 per cent) were Grade III. There were three deaths among the 90 hospitalized cases in this series, providing a case-fatality rate of 3.3 per cent. When one realizes, however, that about 43 per cent of all poisonous snakebite cases in South Carolina are managed on an out-patient basis, the true case-fatality rate probably is about 1.6 to 2.0 per cent. This is confirmed by the fact that there were only seven snakebite deaths in South Carolina during the ten year period, 1950-1959.¹ The three people who died from snake venom poisoning during 1958 and 1959 were engaged in the following activities: a 41 year old Negro saw mill worker was bitten by a rattlesnake while working in the woods

and died seven hours later; a 21 year old white service station attendant was bitten by an unidentified snake while hunting and died 15 hours later; and a 13-year old Negro child was bitten by a rattlesnake and died six days later. Contrary to popular belief, few patients die within the first few hours following a poisonous snakebite. About 70 per cent of them die from 6 to 48 hours after venenation takes place.⁶

Treatment

The current treatment of North American pit viper (rattlesnake, cottonmouth moccasin and copperhead) bites includes both minor surgery and medical forms of treatment. A constricting band (tourniquet) should be applied lightly to the involved extremity several inches proximal to the bite. The constricting band should be applied only tight enough to occlude the superficial venous and lymphatic flow. *It should not occlude the arterial circulation* and it should be released every 10 to 15 minutes for a minute or two. As edema resulting from venom poisoning spreads, the constricting band should be advanced to keep just ahead of the swelling. The purpose of the constricting band is to impede the spread of venom until incision and suction can be used to remove the venom mechanically or until antivenin can be administered to neutralize the venom.

Incision and suction is effective in removing venom from experimental animals up to about 120 minutes after the venom is injected. The sooner it is used, the larger the amount of venom that can be removed. Suction should be used for about one hour. We have found the suction cups supplied in the Cutter and the Becton-Dickinson snakebite first-aid kits effective for removing pit viper venom. Incisions, one-quarter inch long and one-eighth to one-quarter inch deep, are made into the subcutaneous tissues over the fang punctures. A few (3 to 5) additional incisions may be made in the surrounding edematous tissues. A large number of incisions is not needed. Immobilization aids in limiting the spread of venom. However, if one

must decide between immobilization or seeking prompt medical treatment, the latter should be sought.

The "3 A's" (antivenin, antibiotics, and tetanus antitoxin or toxoid) are recommended, in addition to incision and suction, in treating all serious pit viper bites. Antivenin *Crotalidae* Polyvalent (Wyeth) is effective in neutralizing the venoms of all North American pit vipers. It is not protective against coral snake venom. Since antivenin is manufactured from horse serum, the patient should receive a skin test before antivenin is given. For Grade I venenations antivenin may be administered in the deltoid or gluteus muscles. In Grade II and Grade III venenations, antivenin diluted in 1000 ml of normal saline may be given intravenously.⁷ Studies with radioisotopes have shown that antivenin accumulates at the site of the bite more rapidly after intravenous administration than after intramuscular administration.⁸ Injection of antivenin into the local bite area is not a particularly effective way to administer antivenin. We have found the following amounts of antivenin useful in treating the various grades of venenation: Grade 0 (no venenation) requires no antivenin; Grade I (minimal venenation) may require 10 ml (one ampoule) of antivenin; Grade II (moderate venenation) requires 30 to 40 ml of antivenin; and Grade III (severe venenation) requires 50 ml or more of antivenin.

Since snakes' mouths and venoms may harbor pathogenic organisms, antibiotics and tetanus antitoxin or toxoid should be given prophylactically. Gram negative organisms predominate, hence a broad spectrum antibiotic is indicated. Penicillin used by itself is not adequate treatment.

Cortisone and ACTH do not affect the survival rate of animals poisoned with pit viper venom. They probably should not be used during the first few days after venenation, although they may be beneficial later in treating serum sickness resulting from antivenin therapy. Antihistamines are contraindicated as they shorten the survival time of animals

poisoned with pit viper venoms. Shock resulting from venom poisoning should be treated with infusions of blood, plasma, saline solution and vasopressor drugs. Meperidine hydrochloride and other analgesics may be given to relieve pain. Recently there have been reports of excessive tissue necrosis and amputations associated with cold therapy such as packing an extremity in ice or using ethyl chloride.⁸ In our opinion, cold therapy should not be used in treating pit viper bites.

Summary

An estimated 184 people are treated for bites by poisonous snakes every year in South Carolina. Of these, 104 (57 per cent) are admitted to hospitals for treatment and 80 (43 per cent) are treated on an out-patient basis in hospital emergency rooms and in physicians' offices.

Of 90 in-patients reported in detail by South Carolina hospitals during 1958 and 1959, 31 (34 per cent) were bitten by rattlesnakes, 23 (26 per cent) by copperheads, 4 (4 per cent) by cottonmouth moccasins, and 32 (36 per cent) by unidentified poisonous snakes. "Seasonal epidemics" of snakebites occurred in South Carolina with 89 of the 90 cases reported from April through October. With four exceptions, the bite accidents were rather evenly distributed throughout the day from 6:00 A. M. - 8:59 P. M.

Males had higher bite rates than females and non-whites had higher rates than whites. The occupational groups most frequently bitten were children—46 bites and farmers or farm laborers—15 bites. Ninety-four per cent of the bites were on the extremities, 45 per cent on the upper extremities and 49 per cent on the lower extremities. There were three deaths among the 90 hospitalized snakebite victims, a case-fatality of 3.3 per cent. The case-fatality rate for all snakebite cases was about 1.6 to 2.0 per cent. Current snakebite treatment is discussed.

ACKNOWLEDGMENT: The authors cite with gratitude the technical assistance of the following persons: Genevieve Calescibetta, Judi Pummill, Maxine Bewley and Mary Ann Preu.

POISONOUS SNAKES

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Prognosis of "pure" petit mal. R. D. Currier, K. A. Kooi, and L. J. Saidman. *Neurology* 13:959 (Nov.) 1963.

A follow-up study of 32 patients with petit mal only (no prior grand mal) and with the typical electroencephalogram (EEG) was carried out 18 years after the onset. At an average age of 25, 38% had developed grand mal which in half of the cases ceased spontaneously or was easily controlled, 31% had remission of their petit mal and grand mal never developed, and 56% continued to have petit mal, usually without grand mal, the petit mal being minimal and of very little trouble to the patient. If the patient reached the age of 21 with petit mal, it appeared to continue indefinitely and if grand mal had not developed in the patient by 18 years, it did not develop later. "Pure" petit mal appears to be a relatively benign disorder which occurs twice as often in girls as in boys. It is associated with a family history of grand mal seizures in half the cases and occurs usually between the ages of 3 and 13. More often than not, it continues into adult life, usually unaccompanied by grand mal seizures. "Pure" petit mal is not transformed into psychomotor seizures and is not associated with mental or neurological deficits or degeneration. Various factors which may give a better prognosis are discussed.

The treatment of acute infectious hepatitis. M. D. Nefzger and T. C. Chalmers. *Amer J Med* 35:299 (Sept.) 1963.

A ten-year follow-up study was made of the effects of diet and rest in cases of acute infectious hepatitis. During the period from November, 1951, to September, 1952, 460 enlisted men from Korea and Southwest Japan were selected for what may be considered two independent clinical treatment trials. These treatment trials failed to show that strict bed rest was superior to *ad libitum* bed rest in the treatment of acute infectious hepatitis, or that the grad-

ual resumption of physical activities prevented complications during convalescence. It was shown that the forced intake of a high-protein diet shortened the period of acute illness by about 20%. When all hepatitis patients were compared with a group of 496 enlisted men who served in Korea during the period of study but who were not hospitalized at any time, the mortality rates were found to be almost identical. However, the hospital admission rates, the proportion of men with at least one change in employment, and the proportion of men with complaints referable to hepatitis are greater for the hepatitis patients.

Peptic ulcer perforation and complications: An unusual case. By R. R. Bradham and H. B. Gregorie, Jr. (Charleston) *Amer. Surg.* 29:620, 1963.

An unusual case of perforated duodenal ulcer with intramural dissection of the duodenal wall, massive hemorrhage, intussusception, and jaundice in a patient who survived is presented. The radiographic picture of this lesion demonstrates the lesion encountered at operation. The operative solution to this complicated dilemma is described and diagrammed. The major factor in the patient's survival was the unrelenting attention to details of abnormal physiology and their correction by the house staff and nurses. Fluid and electrolyte balance was evaluated constantly, not only by the usual methods, but also by evaluation of the urine electrolyte values, and concentrations in abnormal fluid losses via the drains, jejunostomy, and gastrostomy tubes. The importance of the adequate quantities of calcium gluconate, salt poor albumin, protein hydrolysates, fat emulsions, crude liver extract, and tube feedings by the Barron food pump are cited. Other supportive measures directed towards vital organ function were a constant part of the patient's therapeutic program.

The knowledge acquired in treating this patient will aid greatly in the management of patients with similar massive injuries to the duodenum.

AN EVALUATION OF ANTAZOLINE AS AN ANTI-ARRHYTHMIC AGENT

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The growing recognition of antazoline, an antihistaminic, as an anti-arrhythmic agent with few undesirable side effects, led to the present evaluation of this drug. Angelakos¹ and Angelakos and Hegnauer² have observed that the depressant effect of antazoline on ventricular tachycardia in the dog under hypothermic situations, is superior to quinidine and procaine amide. Kline *et al*³ recently evaluated the drug in the human in supra-ventricular and ventricular arrhythmias. Their conclusions were that antazoline, though structurally different from quinidine and procaine amide, is an effective and well tolerated anti-arrhythmic agent for therapy of premature atrial or ventricular systoles.

The present evaluation represents a broad spectrum of patients with supra-ventricular and ventricular arrhythmias, treated with antazoline, with emphasis solely on rapid intravenous administration of the drug.

Methods

A total of 66 patients were selected for study on the basis of the presence of cardiac arrhythmia. Forty-three patients had supra-ventricular arrhythmias and 21 had ventricular arrhythmias. Two instances of complete heart block were observed for any possible effect on the ventricular conduction mechanism. The ages ranged from 20 to 72 years. The cardiac diagnoses were multiple, with arteriosclerotic heart disease, myocardial infarction, functional, rheumatic and metastatic disease comprising the majority of diagnoses. Only 16 patients were without organic disease.

Antazoline was supplied by Ciba Pharmaceutical Company while the author was a fellow in cardiology at the Medical College of Georgia, Augusta, Georgia.

Antazoline was used in a patient already receiving antiarrhythmic drugs only after the previous agent was stopped. Digitalization was maintained in a patient, but only 3 patients other than the 5 intoxicated received this medication.

A control electrocardiographic tracing was made to establish the type of arrhythmia prior to drug administration. No supportive therapeutic measures such as oxygen, vasopressors, shock position, etc. were used in these patients. The drug was administered only by the intravenous route on a schedule of 50 mg undiluted every 30 seconds for a total of not more than 200 mg at any one time. A tracing was made continuously during each 50 mg injection and then every 30 seconds for 10 minutes following the total injections, and in some occasions continuously. In most instances it was desirable to record continuously from 2 minutes after the last injection until 5 minutes after injection since this seemed to be the responsive period where conversion might take place. Follow-up tracings were made 24 hours later.

Analysis of the tracings was made for disappearance of the arrhythmia or a reduction in frequency of premature and ectopic beats. The reduction of premature beats was roughly quantitated as suggested by Kline, *et al*³ and thought to be significant when there was a 70% or more reduction in the premature systoles. Further evaluation of the electrocardiograms was made for changes in the P-R interval, QRS interval and Q-T interval, as well as changes of the QRS configuration, ST segment and T waves.

Repeated injections were made in only a

few patients who had recurrence of arrhythmia. As precaution against possible hypotension, the drug was usually administered through an IV tubing set already in place and with available vasopressors at hand.

Results

Table I lists the various supra-ventricular

TABLE I
SUPRAVENTRICULAR ARRHYTHMIAS

TYPE	NO.	NO.
	PATIENTS	CONVERSIONS
Sinus tachycardia	2	0
Paroxysmal atrial tachycardia	10	10
Nodal tachycardia	5	3
Premature atrial systoles	12	12
Atrial fibrillation	8	6
Atrial flutter	6	0
TOTAL	43	31

arrhythmias and the number of conversions to regular sinus rhythm in each. All of the patients with ventricular arrhythmias had an adequate response, as noted in Table II.

TABLE II
VENTRICULAR AND OTHER ARRHYTHMIAS

TYPE	NO.	70% OR MORE
	PATIENTS	REDUCTION
Premature ventricular systoles	15	15
PVC's with digitalis intoxication	5	5
Paroxysmal ventricular tachycardia	1	1
Complete heart block	2	0
TOTAL	23	21

Overall, 52 out of 66 patients received some beneficial effect from the drug. Only in sinus tachycardia, atrial flutter and complete heart block was there complete failure to response.

Conversion to regular sinus rhythm was most successful in paroxysmal atrial tachycardia and premature atrial systoles where conversion or reduction in beats usually occurred 2 to 5 minutes after injection. In all but one patient, with multiple myeloma and amyloid deposits around the AV node at autopsy, the effect lasted longer than 48 hours. Conversion of nodal tachycardia (Figure I) was equally as prompt, but required

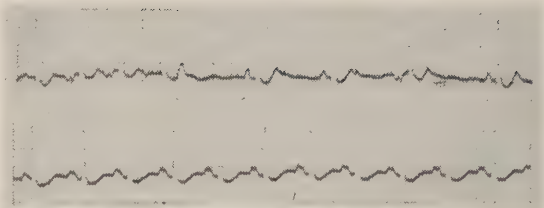


Fig. 1-A. 65 year old colored female with metastatic carcinoma of the stomach, developed nodal tachycardia. Had been well controlled on digitalis for 14 years because of "heart flutters." No digitalis intake for 2 weeks prior to this episode. Following 150 mg antazoline IV, prompt conversion took place 3 minutes later. An occasional PAC and premature nodal beat persisted for several minutes.

Fig. 1-B. 15 minutes after conversion a normal sinus rhythm was maintained.

the upper range of drug administration of 200 mg, whereas in paroxysmal atrial tachycardia 100 to 150 mg usually sufficed. (Figure II)

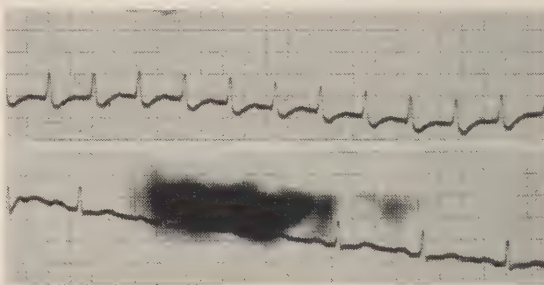


Fig. 2-A. Supraventricular tachycardia, probably PAT, in a 55 year old white female with previous history of paroxysmal atrial tachycardia unresponsive to any drug except digitalis. No significant cardiac findings. Present attack lasted 4 hours.

Fig. 2-B. After 200 mg antazoline IV, conversion occurred 5 minutes later.

Conversion of atrial fibrillation was most easily accomplished in recent or paroxysmal atrial fibrillation. Only 1 of the 6 conversions had chronic atrial fibrillation. The mechanism of conversion was observed in several patients while simultaneous electrocardiogram tracings were monitored. Within 5 to 10 minutes after drug injection, the ventricular rate increased by at least 20 to 30 beats per minute. This persisted, despite digitalization in 2 patients, for 1 to 2 hours, and then a prompt conversion to sinus tachycardia occurred. Gradual

slowing of the sinus rate then took place.

In no instance of atrial flutter did satisfactory conversion occur. Every patient responded to 200 mg of the drug by demonstrating increase in the ventricular rate and then conversion to paroxysmal atrial tachycardia with a 2 to 1 block. The atrial rate in each case was slower than the atrial flutter rate, however the ventricular rate with the 2 to 1 block was usually faster than that with flutter. No conversion occurred in any patient, and in 2 instances block persisted for 36 hours or more.

All of the ventricular arrhythmias responded with a 70% or more reduction in number of premature beats. Premature ventricular systoles, unrelated to digitalis intoxication, were very easily made less frequent within 2 to 3 minutes after injection. The drug was found to be very useful clinically in controlling bigeminy and trigeminy in digitalis intoxication. One patient with paroxysmal ventricular tachycardia of unknown cause responded dramatically within 3 minutes after injection of 200 mg IV with complete cessation of the tachycardia.

Two patients with complete heart block were observed as good examples of pre-existing conduction defects to see if the drug had any effect in an abnormal bundle conduction situation. There was no alteration of the electrocardiograms of these two patients. None of the electrocardiographic parameters measured demonstrated any change in any of the above clinical situations.

Side effects were usually minimal but at least some side effect was present in 59 patients. The most common side effect was that of drowsiness. Lightheadedness occurred in these instances after 50 mg of the drug. A peppermint taste in the pharynx and posterior part of the tongue associated with a hot, burning sensation in these areas was not uncommon also. Nausea was prominent in 3 instances. Two patients had massive bowel evacuation following the drug. Hypotension occurred in one patient mentioned above with a myocardial infarction and in another with myocarditis and nodal tachycardia. An

increase in ventricular rate in both instances coupled with a poor myocardial reserve probably accounted for the fall in blood pressure. Slowing of the rate in these patients was associated with clinical improvement.

Comment

Antazoline possesses a wide range of therapeutic effectiveness in the supra-ventricular and ventricular arrhythmias. It is most impressive in the paroxysmal variety of arrhythmias, as well as in premature systoles of both atrial and ventricular origin. It was found to be the least effective in atrial flutter. Conversion of paroxysmal or recent atrial fibrillation is apparently attended by more success than the chronic variety.

A mechanism of action of this drug would seem to be suggested by several observations. First of all it seems to have a ventricular depressant effect on ectopic beats as noted by the progressive reduction of ventricular beats in the patient with paroxysmal ventricular tachycardia. Also it seems to have an action similar to quinidine by slowing atrial activity and at the same time enhancing A-V conduction, without producing electrocardiographic evidence of altered electrical conduction at the 200 mg dosage. As mentioned by Kline, *et al.*,³ it would seem that this drug would be indicated in situations where there is pre-existent A-V or intra-ventricular block. The two patients with complete block seem to reinforce this indication even though they had no particular arrhythmia conversion.

There would seem to be no contraindication to the use of the drug with concomitant drug therapy (i.e. quinidine, pronestyl or digitalis). Certain clinical situations would seem to demand caution in its administration. Because of its tendency to increase ventricular response by accelerating A-V conduction, hypotension may ensue in such instances as myocardial infarction, myocarditis or other situations where myocardial reserve is compromised severely. The paucity of harmful side effects again suggests its usefulness in combination with other antiarrhythmic agents. The drowsiness certainly serves as a good

sedative in many of the situations aggravated by anxiety.

Summary

This drug would seem to be effective in the management of supra-ventricular and ventricular arrhythmias. Its superiority would

seem to lie in fewer and less undesirable side effects. Specific contraindications are related to its mechanism of action and effects on hemodynamics. Its rapidity of action is a quality needed for effective emergency use.

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Multiple large jejunal diverticula with severe hemorrhage. William H. Prioleau, M. D. (Charleston) *Amer Surg*, 29:841, December 1963.

Jejunal diverticula are relatively rare and particularly so when multiple, large and accompanied by severe hemorrhage. It has been postulated by Edwards that they result from localized increased pressure secondary to irregular muscular contractions. Symptoms produced by them have no particular pattern. They are commonly not detected at routine x-ray or post-mortem examinations—a factor in their low reported incidence. Individual diverticula may be treated in a number of ways; for multiple diverticula the treatment of choice is resection of the involved segment of bowel. Report of a case with severe hemorrhage treated by resection of three feet of jejunum with good recovery.

Psychological considerations in patient isolation on a general surgical service. William H. Prioleau, M. D. (Charleston) *Amer Surg*, 29:907, December 1963.

Isolation of patients is attended by psychological problems affecting the patient, his family, the attending physician and the hospital personnel. Isolation to be effective must be enforceable and to this end it should be adjusted to the requirements of the individual case, and the available personnel and facilities. It should not be unnecessarily conspicuous or obtrusive. In some cases, disregard of isolation procedures by the attending physician constitutes a serious problem. Final authority should be vested in the Committee on Infections. This committee may serve to give impersonal backing to the attending physician when he is in the difficult position of incurring the patient's displeasure in order to comply with hospital regulations. Alleviation of psychological difficulties facilitates administration and results in a more acceptable and effective isolation program.

Death from tonsillectomy. N. Tate (Salisbury, Wiltshire, England). *Lancet* 2:1090, Nov. 23, 1963.

Ninety-three deaths due to tonsillectomy reported in a five-year period are analyzed. Postoperative hemorrhage occurred in 62 cases. Errors of anesthesia accounted for the majority of the remaining 31 deaths. The traditional management of these cases is criticized and suggestions are made to reduce the 1:10,000 mortality. The difficulty in reanesthetizing bleeding patients is stressed.

Beeturia: Its incidence and a clue to its mechanism. W. C. Watson (Glasgow, Scotland), R. G. Luke, and J. A. Inall. *Brit Med J* 2:971 (Oct 19) 1963.

Beeturia is the pink to deep red coloration of the urine which occasionally follows the eating of beets. It is widely believed that it will occur in anyone who eats enough beets, but little is known about its mechanism. Observations on a patient in whom severe anaphylactic shock developed in connection with gross beeturia led the authors to conduct a special test using 177 subjects. There were 58 healthy subjects, 48 with miscellaneous illnesses, 11 with pernicious anemia, 7 with other forms of anemia, 18 with the malabsorption syndrome, and 35 with iron deficiency. The person tested emptied the bladder at 9 P. M.; then was given 100 gm of commercially prepared beets without any other food; all urine excreted until 8 A. M. was collected and tested for pigment. The incidence of beeturia in controls was only approximately 14%, but in patients with iron-deficiency anemia it was 48.6% and in iron-deficient subjects not previously treated with oral iron it was 80%. The influence of orally administered iron suggests that the apoferritin carrier mechanism may play some part in the development of beeturia. It is possible, but not definitely proved that beeturia may occur in certain forms of idiopathic enteropathy.

CONTROL OF HODGKIN'S DISEASE AND THE LEUKEMIAS WITH COLCHICINES

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Derivatives of the alkaloid *Colchicum autumnale* have been shown in earlier reviews^{63, 64, 65} to be among the most effective agents in the management of Hodgkin's disease and the leukemias. The present study surveys the use of colchicines in both single and multiple drug therapy for the years, 1949-62.

Use of Colchicines in Single Drug Therapy

Chronic Granulocytic Leukemia. No fewer than 60 clinical reports have been published on the use of colchicines in the treatment of chronic granulocytic leukemia. Fromowicz¹⁴ employed deacetyl-N-methylcolchicine, known also as substance F (Richstein), or demecolcine, or colcemide, to improve the blood picture of all 12 patients: the granulocytes were restored to normal in the blood, and almost normal in the bone marrow, with 11 patients showing reduction in the size of the spleen; a year later¹⁵ he recorded 16 complete remissions in 27 patients treated with colcemide alone or in combination with x-rays, urethan, or myleran, with not one case relapsing at the time of reporting who received multiple drug therapy. Ott and Halana⁶³ reduced the leukocyte count in 20 of 21 patients, but the responses were brief and partial. Huguley²⁷ employed demecolcine to control 19 of 25 patients. Gigante²⁷ induced reduction in leukocyte counts and spleen size, and improvement in the patients general condition in 17 out of 22 of those treated with colcemide. Wiedermann⁶¹ observed 11 complete and six partial remissions in 18 patients.

Ivanov²⁹ noted clinical improvement in all 17 patients he treated with the alkaloid, with most of them experiencing complete hematologic remissions also. Dube and Srivastava¹² reported that 14 of 15 patients had good clinical and hematologic remissions of 10 to 14 months on colcemide.

Lessmann and Sokal have released four publications on the treatment of chronic myelocytic leukemia with colcemide: in 1957³⁸ they had all five patients respond hematologically, although the leukopenia in one was severe; in 1959³⁹ they recorded an uneventful pregnancy and delivery of a normal baby in a patient treated with the alkaloid; in 1960⁴⁰ they tabulated three complete remissions and six partial in nine patients with chronic myeloid leukemia, while one of five patients in the terminal blastic stage of the disease had a distinct response to the alkaloid and four had brief objective remissions; in 1961⁴¹ they reported subjective improvement in 13 of 14 patients, and reduction in spleen in 11; they concluded that the alkaloid was as effective as the best agents in the palliation of chronic myelocytic leukemia. Lessner and associates filed two reports on the action of the new derivative, trimethylcolchicinic acid methyl ether d-tartrate (TMCA) on chronic myeloid leukemia: in one report⁴² all 10 cases responded with fall in white blood cells, platelet counts, size of spleen and relief of bone pain; a year later⁴³ they described a significant fall in the total WBC of 10 of 11 cases and a marked

decrease in the spleen of four of six patients; side effects included development of leukopenia, thrombocytopenia and stomatitis. Bock and Gross⁴ published a preliminary clinical report in 1953 on the colchicine therapy but without details on the cases. In a second release⁵ they recorded two short remissions with demecolcine, and in a third paper⁶ they noted the ambulatory state of six of 11 patients following therapy. Moeschlin, *et al.*,⁴⁹ observed that demecolcine had 30 times lower toxicity than colchicine, and they described clinical and hematologic response in two patients; in 1954⁵⁰ they reported almost complete remissions to 13 months in 10 patients administered demecolcine. Wildhack⁸² noted nine good responses in 10 patients given colcemide, but hemorrhages and loss of hair were adverse side effects. Keibl has presented four studies on the action of colchicine on patients with myelocytic leukemia: in 1950 he and Lötsch³¹ recorded two good remissions with the combination of colchicine and x-rays; in a second report³² he added another response with the same combination; in 1951³³ he used the potentiating effect of radiation to induce another good hematologic response; in 1955³⁴ he described good remissions in all seven cases treated with colcemide. Truhaut and Saracino released two reports on the effect of N-deacetyl-thio-colchicine on chronic myelocytic leukemia: in 1956⁷⁵ they observed six good remissions in eight patients, and the next year⁷⁶ they noted six more good responses which lasted to 24 months. Leonard and Wilkinson³⁰ reported that all eight patients treated with colcemide had a lowering of WBC, while the percentage of hemoglobin was increased; six cases registered clinical improvement. Leonardi and D'Agnolo³⁷ described a decrease in leukocytes and an improvement in the clinical condition of all six patients to whom they administered demecolcine, while Holly²³ employed the alkaloid to induce complete remissions in six other patients. Schumann^{68,67} recounted good remissions in all six patients he treated with colcemide. Polli, *et al.*,⁵⁰ noted good clinical and hematological responses in five patients, in-

cluding lowering of the WBC, improvement in the red cells, decrease in the size of spleen and liver, and a sense of well-being in all. Zbinden⁸³ secured a good response in four of five cases given colcemide. Asua² recorded remissions in all five cases he treated with the same derivative. Paolino, *et al.*,⁵⁴ in 1955 observed the WBC to be normal in five patients given deacetylcolchicine, and in 1957⁵⁶ they reported some remissions in 12 patients with this agent. Alexandrides, *et al.*,¹ used colcemide to induce fair remissions in three of five patients, while Osamura and Ito⁵² classified their remissions in all three patients as good. Rozman⁶² described two excellent remissions and one fair in four cases, following colcemide therapy, and Vercillo and Esposito⁷⁸ obtained four good responses in all four cases. Mayall undertook several studies on the action of demecolcine in blood diseases: in a preliminary report⁴⁴ he noted improvement in two patients in whom the alkaloid was well tolerated; in a second release⁴⁵ he had two other patients experience a fair response; a third study⁴⁶ showed a good remission lasting for five months in one of two patients; a fourth report⁴⁷ listed two brief responses in as many cases treated, and a final study⁴⁸ listed a good clinical and hematological remission and a partial response in two other cases. Grunke²⁰ observed good hematologic remission in two patients on colcemid treatment, and Grant¹⁸ induced temporary response in two other patients. Volterra, *et al.*,⁸⁰ used colcemide to secure brief benefit in two cases. Favorable responses in single cases of chronic myelocytic leukemia with colcemide have been reported by Hrdek,²⁴ Jyo and Endoh,³⁰ Netousek, *et al.*,⁶¹ Shanbrom and Kahn,⁶⁸ Sheehy and Ransone,⁶⁹ Stich,⁷¹ Velasco and Sokal,⁷⁷ Voit and Milczuk,⁷⁹ and Zwetschke and Neuwirtova.⁸⁴ Chilov, *et al.*,¹⁰ failed to secure any hematologic response in a patient given colchicine.

Several clinical reports on the use of colchicines in the control of chronic granulocytic leukemia give insufficient data to evaluate the treatments. Consoli¹¹ reported some favorable clinical results while other patients

showed serious toxic effects after colcemide therapy. Hibino²³ observed some remissions in 27 patients who were given several cytostatic drugs, including demecolcine. Storti and Gallinelli⁷³ judged their best results were with patients with Hodgkin's disease and chronic myeloid leukemia in their treatment of 18 cases of lymphoid hemoblastosis with Substance F.

Chronic Lymphocytic Leukemia. Chronic lymphocytic leukemia is much less responsive to colchicines than is the chronic form of granulocytic leukemia. Truhaut and Saracino⁷⁶ observed only two brief responses in eight patients receiving N-deacetyl-thiocolchicine. Gigante¹⁷ noted little effect of colcemide in five patients. Storti and Gallinelli⁷² induced a six months remission in one of four patients given demecolcine. Holly, *et al*,²³ reported no improvement in three patients given this alkaloid, and Lessner, *et al*,^{42, 43} described no benefit from the use of TMCA in six patients. Leonardi, *et al*,⁸⁷ and Vercillo and Esposito⁷⁸ recorded failures in the treatment of two patients each with colcemide. Volterra, *et al*,⁸⁰ also noted failure in a patient treated with the alkaloid, while Leonard and Wilkinson³⁶ and Moeschlin, *et al*,⁵⁰ observed that colcemide was contraindicated in single patients they treated. In a second study Moeschlin, *et al*,⁴⁹ observed subjective improvement only in a patient given demecolcine and transfusions. Hausmann²¹ treated 79 patients with various antileukemic drugs, including colcemide, but recorded few details on the results. Bock and Gross⁶ noted variable results in patients with lymphatic leukemia, following colcemide therapy.

Hodgkin's Disease. More than two dozen clinical studies have been published on the management of Hodgkin's disease with colchicines. Paolino, *et al*, released three reports: in two releases^{54, 56} they tabulated seven good and two fair subjective responses, and five good objective remissions in 15 patients treated with colcemide, and in a third investigation⁵⁸ they induced responses in 23 patients. Grollman, *et al*,¹⁰ described striking antipyretic and analgesic effects in all 10 pa-

tients treated with this alkaloid, but the remissions were of brief duration; no serious side effects accompanied the use of the drug. Holly, *et al*,²³ induced brief responses in 10 patients with colcemide. Romualdi⁶¹ secured five good and two fair regressions in seven patients, while Zbinden⁸⁸ noted three good responses in seven cases. Storti and Gallinelli⁷² recorded three remissions in six patients treated with colcemide, and in a second study they recorded their best remissions in four cases of Hodgkin's disease out of 18 lymphoid hemoblastoses treated with the drug. Chilov, *et al*,¹⁰ noted that three of five patients experienced hematologic remission on colchicine. Vercillo and Esposito⁷⁸ observed a fair response in all three patients receiving colcemide. Baer and Adorf³ had the leukocytes reduced in two of three patients by Substance F. Truhaut and Saracino⁷⁶ noted good but brief response in two patients given colcemide. Neither Eckhardt¹³ nor Bock and Gross⁶ could induce responses in two patients given demecolcine. Petrone⁵⁷ and Torrioli⁷⁴ both secured brief improvement in single cases of Hodgkin's disease with colchicine, while Huant⁸⁶ noted a satisfactory remission in a patient given N-deacetyl-thiocolchicine. Moeschlin, *et al*,^{49, 50} in two studies failed to induce any response in two patients with demecolcine. Revol, *et al*,⁶⁰ described spontaneous abortions in two patients who received colchicine in the first two or three months of pregnancy.

Several reports give insufficient data to determine the value of treatment of Hodgkin's disease with colchicines. Gigante¹⁷ observed some remarkable remissions in 18 patients administered colcemide. Consoli¹¹ noted serious toxic effects of colchicine, but there were some favorable clinical results. Isch-Wall²⁸ and Kostkowski³⁵ observed brief responses with this derivative, and Volterra, *et al*,⁸⁰ reported some good response in six patients given colcemide.

Acute Leukemia. Patients with acute leukemia were even less responsive to colchicines in two dozen clinical reports. Ivanov²⁹ treated eight patients with acute

myelocytic leukemia and reported seven brief, partial clinical and hematologic remissions, while one acute lymphocytic leukemia failed to respond. Lessner, *et al*, in one report⁴² failed to secure a response in two patients with acute myelomonocytic leukemia who were given TMCA; in a second report⁴³ they recorded failures also in six cases of acute myeloid leukemia and one lymphoid leukemia. In two studies Moeschlin, *et al*, had a varied experience with demecolcine: in 1952 the alkaloid and transfusions gave a brief response in a case of acute myeloid leukemia,⁴⁹ while in 1954 they reported that⁵⁰ six patients with acute and subacute myeloid leukemia responded well. Leonard and Wilkinson³⁶ described some lowering of the WBC in four of six patients with acute myeloid leukemia who received colcemide, but in all cases the condition of the patients deteriorated on the drug. Mayall published five brief studies on the action of colcemide: in one⁴⁴ he noted that two patients with subacute leukemia improved, and that the drug was well tolerated; in a second⁴⁶ a patient with subacute monocytic leukemia had a partial response for five months, and two with acute leukemia had some improvement; in a third report⁴⁵ three cases of acute leukemia enjoyed partial and brief hematologic responses; in a fourth report⁴⁷ two patients with acute aleukemic leukemia had brief hematologic remissions; in a final report⁴⁸ two other acute cases experienced good hematologic remissions. Vercillo and Esposito⁷⁸ observed fair improvement in four cases of subacute myeloid leukemia given colcemide, while Dube and Srivastava¹² noted fair responses for 4, 5, 6, and 12 weeks in five cases of acute leukemia. Bock and Gross⁶ obtained some hematologic response in two cases of myeloid leukemia with colcemide, but a case of lymphoid failed to respond. Hibino²² included demecolcine among the cytostatic drugs he employed to secure remissions among 50 cases of acute myeloid leukemia and 17 of paramyelo-blastic leukemia, but there were no tabulations on the results; five years later he and associates²²⁰ recorded one partial remission

in two patients with acute leukemia. Grant¹⁸ secured slight responses in two patients with acute myeloid leukemia but none in lymphoid with colchicine. Alexandrides, *et al*,¹ noted a brief response in a patient with myeloid leukemia with colcemide, but a case of lymphatic failed to respond. The following investigators recorded failures with colcemide in two patients each who had acute or subacute leukemia: Asua,² Holly²³ Leonardi and D'Angnolo,³⁷ Paolina, *et al*,^{54, 56} Polli, *et al*,⁵⁹ and Schumann.^{66, 67}

Monocytic Leukemia. The responses of several cases of acute monocytic leukemia to colchicines have been registered in the preceding section. Mayall⁴⁴ reported improvement in a patient with chronic monocytic leukemia who received colcemide, and in 1956⁴⁷ he noted a five months remission in another patient, and a partial remission in a third.⁴⁸ Paolina, *et al*,⁵⁴ failed to secure any benefit in a patient with monocytic leukemia who was given colchicine.

Multiple Drug Therapy With Colchicines

Remarkably few studies have been made with colchicines in association with other drugs in the management of Hodgkin's disease and the leukemias. The investigation of Fromowicz¹⁵ has been cited, and his conclusion that longer and better remissions were obtained following combination chemotherapy should stimulate further clinical trials. Cecchi and Ferraris⁹ induced almost complete remissions in two patients with Hodgkin's disease who were administered large doses of prednisolone followed by colcemide for three and five months respectively. Bosi and Castoldi⁷ observed a marked response in another patient with this blood disorder who received prednisone and colcemide. Broun, *et al*,⁸ treated five patients with Hodgkin's disease with colchicine, desoxycorticosterone and ascorbic acid to induce four remissions ranging from two weeks to six months. Huan²⁸ combined thiocolchicine with desoxyribonucleic acid to obtain clinical and hematologic remissions in three patients with chronic lymphocytic and myelocytic leukemias. Fukase¹⁶ employed the combination colce-

mide and glucocorticoid in two patients with monocytic leukemia to induce improvement.

Discussion

An 88% remission rate in 319 patients with chronic granulocytic leukemia who were given colchicines alone makes this alkaloid one of the most effective chemotherapeutic agents in the management of this blood disease. Many of the 60 clinical reports reviewed speak of the relatively mild toxicity of so potent a drug. In contrast to the results with myelocytic leukemia, colcemide and other colchicines gave poor results in patients with chronic lymphocytic leukemia. A 74% remission rate in 81 cases of Hodgkin's disease gives colchicines a useful place in the control of this blood disorder, while a 52% rate

in 77 patients with acute leukemia is much below the management achieved by corticosteroids and mercaptopurine.

A striking feature of this study is the few trials of multiple drug therapy of colchicines with other cytostatic agents. The absence of such data in our largely empirical approach to the control of blood diseases, together with some promising preliminary results, constitutes a challenge.

Acknowledgments. The original literature has been made available for this study by the National Library of Medicine and the libraries of Furman University and Greenville General Hospital. Financial assistance is gratefully acknowledged to Research Corporation of NYC.

A list of the references cited may be obtained from the author.

Successful Resection of Syphilitic Aneurysm of Aortic Arch, by Gilbert B. Bradham and Julian T. Buxton, Jr. (Charleston) Arch Surg 87:521-524, Sept. 1963.

Because of the high mortality and technical aspects of such surgery, a single case of syphilitic aneurysm of the aortic arch and innominate artery successfully resected is presented. Cardiopulmonary bypass was avoided with its attendant problems of clotting, exposure to large amounts of foreign blood, and prolonged operative time. The need of pre-operative categorization of lesions of the arch to pre-determine operative prognosis is stressed.

Treatment of pilonidal sinus: Surgical and etiologic considerations. William H. Prioleau, M. D. (Charleston) Amer Surg 29:649, Sept. 1963.

The recurrence rate following operations for pilonidal sinus remains high, even though the operation is soundly conceived and well performed. The most reasonable explanation is based upon considering pilonidal sinus an acquired disease rather than a congenital anomaly. At the time of puberty, hair penetrates the soft moist skin of the gluteal crease. A hair granuloma results. It commonly becomes secondarily infected. By whatever method pilonidal sinus is treated this etiological factor must be taken into consideration in the after care in order to pre-

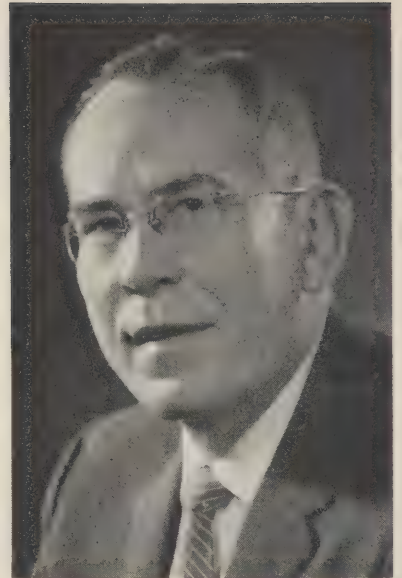
vent recurrence. Sound wound healing must be followed by careful attention to gluteal crease hygiene and shaving. In cases where it is necessary to make an extensive excision of diseased tissue, the denuded area can be covered satisfactorily with a split graft.

Rebound phenomena after anticoagulant therapy in cerebrovascular disease. J. Marshall. Circulation 28:329 (Sept.) 1963.

Ninety patients who had recovered from a non-hemorrhagic cerebrovascular incident (completed stroke) had received anticoagulant therapy during a controlled clinical trial. The occurrence of further nonfatal cerebrovascular incidents was the same as in an exactly comparable control group. The anticoagulant therapy had not, therefore, been effective in preventing further thromboembolic accidents. Nevertheless, when therapy was withdrawn the incidence of cerebrovascular accidents was increased during the succeeding 3 months. The attack rate during therapy was 1.0 per 100 patient-months. During the first 3 months after therapy it rose to 3.2 per 100 patient-months. It then fell to a level of 2.0 incidents per 100 patient-months. This indicates that there is a true "rebound phenomenon" after cessation of anticoagulant therapy, during which time the liability to further thromboembolic incidents is increased.

President's Pages

It would indeed be presumptuous for the South Carolina Medical Association to speak with the voice of authority in matters of undergraduate medical education. However, at times in the past, the Medical College of South Carolina has asked for the help of the Association in the solution of some of its problems, and certainly the production of doctors in sufficient numbers is of concern to every citizen in the state. On this aspect of the educational problem the Association, in its own capacity as well as in its role as a constituent of the State Board of Health, should certainly express an opinion.



To meet the need for adequate medical care of its people, South Carolina should have an increasing number of physicians, and naturally this demand will rise with an increasing population. Already, with approximately one physician to every 1300 persons, we are well below the national average. It is obvious that the output of doctors by medical colleges will have to increase to meet this necessity, and it is equally obvious that South Carolina can ill afford a second state-supported medical school. It has been proposed that additional two year medical schools be established in the state, with the intention of expanding later into a full four year curriculum. However, the bottle-neck is largely in the first two years of medical education; here the cost is high, laboratory facilities and the like are limited, and there is great difficulty in the staffing of a faculty in the pre-clinical medical sciences.

How then can this problem be met. One possible solution which has not previously been suggested involves the acceptance by doctors in other parts of the state of the responsibility for a part of the undergraduate teaching program and the organization of their hospitals for the clinical instruction of medical students. Under such a program the student would receive his instruction in the basic medical sciences in enlarged facilities at the Medical College in Charleston. Some of his clinical teaching would be given in the Charleston hospitals; for other branches he could be assigned to Columbia, Greenville, Spartanburg, or wherever hospital teaching services were organized to fulfill this responsibility. All such teaching would remain under the direct supervision of the administrative authority of the Medical College, and rigid standards of excellence would thus be maintained.

The first step in the implementation of this concept would rest with the hospitals. Meeting the standards for approval as an accredited three year residency training program would assure a high caliber facility suitable for undergraduate instruction. This would involve not only laboratories, a library, an active out-patient department, and a Director of Medical Education, but most important would be a competent staff genuinely interested in teaching and with a willingness to devote their time and attention to this duty. The teaching aspects of such a service would have to be stressed as its primary function as opposed to patient-service duties, and there would have to be complete supervision and control by full-time faculty instructors.

Such a program is feasible. Its cost would not be prohibitive. In addition to providing for the clinical instruction of medical students there would be many extra dividends; it would serve as a means for the adequate training of more resident physicians, it would raise standards of practice in participating hospitals, it would be a stimulating influence for more physicians all over the state, it would result in better patient-care, and it would produce more trained doctors for the people of South Carolina.

With the understanding that this type of program was experimental, it could be effected only by the initiative, leadership, and hard work on the part of many; its success would make the effort more than worthwhile.

Robert Wilson, M. D.

Editorials

The Medical Association and the Hospital Association

The mutual interests of these two Associations are so great that it seems strange that no direct action for joint efforts has been made before now. Certainly, whatever affects doctors affects hospitals, and vice versa.

Recently the Associations have formed a Joint Committee on Public Information with a view toward developing programs of mutual interest. A number of meetings have been held and various projects have been discussed. One project now in progress concerns wide dissemination of information concerning benefits of the Kerr-Mills Act as an effective answer to the needs which the proponents of King-Anderson legislation emphasize. With the joint backing of the South Carolina Medical Association, the South Carolina Hospital Association and the Blue Cross - Blue Shield, a large number of pamphlets explaining the scope and benefits of the Kerr-Mills Act have been prepared and will be distributed to hospital patients and staffs and to individual physicians. It is hoped that this movement will clarify the popular concepts of the Act, which is now administered in this state by the Department of Public Welfare.

Problems of the Journal

Away back in 1905 certain members of our Association who were interested in promoting its welfare succeeded in establishing this *Journal*. It was their thought that a journal would add considerable strength to the organization, would provide a medium for publication of scientific material and also serve as a source of news of interest to the profession, both in and out of the state. Under the editorship of Dr. Robert Wilson the *Journal* got off to a good start.

The cost of publishing the *Journal* has always been very nominal for the members of the Association. Practically all expenses have been met in the past by income derived from advertising, largely by pharmaceutical houses. The amount derived from this source has been large enough to support the *Journal* and even to leave a profit at times. If those days haven't gone forever, at least they have gone for the time being.

Practically all of the states publish journals. In a few instances several states combine to publish one journal. The state journal as an institution has been considered to be eminently worthwhile and appears to have been of much value to members of the medical profession everywhere.

Now the whole family of state journals faces a very critical period of relatively small anticipated income from advertising sources. Pharmaceutical advertisers, our chief dependence, have been made very cautious by the persecution of the Kefauver committee, and they have reduced their advertising budgets considerably. There appears, too, to be a growing feeling among the advertisers that they probably get better returns from the purchase of space in such widely circulated journals as the *JAMA*, *GP*, *Modern Medicine* and *Medical World News* than they do from state journals.

It might be conceivable that our members do not read our journal, and even more conceivable that they do not take opportunity to make comment to detail men and manufacturers on the advertising that we carry. Such comment should impress an advertiser with the fact that he is getting his money's worth of attention, but it is not likely that many of our people take any trouble in this respect.

The prognosis of the present illness among state journals is gloomy. The amount of advertising is steadily decreasing to a point where journals must become much smaller to reduce costs, but even so they are not likely to reach a point of full coverage financially. Most of the advertising in the state journals is handled by a central bureau, the State Medical Journal Advertising Bureau, and this organization is now in the process of employing expert advice toward a solution of the present problem of the steady decline of demand for advertising space. No one has offered a very optimistic or feasible plan for coping with the problem.

It seems likely then that this *Journal* might become a much smaller publication unless new sources of income can be found to support it. Members of the Association can direct advertisers of various kinds to the *Journal* and can bring to the attention of present patrons the knowledge that their messages are reaching the physicians. It is possible that in the future this once profitable *Journal* may entail some expense to the Association. There are many facets to the question and much consideration is being given to a solution.

Nursing Problems

The attention of the reader is called to a series of articles on the problems of the nursing profession and the consequent adjustments faced by the medical profession. Appearing currently in this *Journal*, these articles have much bearing on our situation in South Carolina. They are written by Dr. Decherd Guess of Greenville, who gives clear and fair consideration to the difficulties which seem to have caused much concern to the medical profession and the public, as well as to some elements of the nursing profession. The articles are recommended as offering clear exposition of important relationships which concern us all.

King-Anderson

At the present writing the hearings on the King-Anderson bill scheduled for January 20 are still in the distance, but by the time of this printing, probably they will have been

held and much may have developed of good or bad significance for the profession. At the hearings in November, which were interrupted by the death of the President, little of the testimony which would be expected to be in opposition to the viewpoint of the AMA and similar bodies had been expressed, and undoubtedly in the resumption of the sessions there will be much heard from our opponents. While there is no immediate threat of a vote on the bill, the vote is inevitable, and we cannot afford to let down our defenses, regardless of testimony. We should in fact make a more active effort than before to present our views to the public and especially to our legislators.

Unfortunately, a great many of our members are still apparently utterly apathetic to the whole question. It is to be hoped that the day will never come when this editor and other Jeremiahs will have to say that the profession has been served right for its apathy in regard to legislation which affects not only the practice of medicine, but the welfare of the whole country.

Concerning Election of Council

The special Study Committee of Election of Council met at the Columbia Hotel, October 10th and recommended the following changes in the By-Laws:

Amend Chapter V—Section II of the By-Laws, by striking out the words “that for the office of” on lines one and two of said Section, and inserting in their place, the words “those for the offices of Councilor and,” so that said sentence when so amended shall read as follows:

“Section II. Nominations for office except those for the office of Councilor and Treasurer shall be made from the floor.”

Amend said Chapter further by adding a new Section immediately after Section II to be numbered Section III and by re-numbering the following Sections of said Chapter to conform, the said new Section III to read as follows:

“The Councilor for each District shall be elected by the County Societies comprising such District, in meeting assembled, at least two months prior to the Annual Meeting of

the South Carolina Medical Association at which the term of office of the incumbent Councilor expired. Each County Society in such election shall have one vote for each member of the House of Delegates to which it is entitled."

Respectfully submitted,
Halsted M. Stone, M. D., Chairman
Hugh H. DuBose, M. D.
Joseph H. Cutchin, M. D.
V. Wells Brabham, Jr., M. D.
Sol Neidich, M. D.

COMMITTEE REPORTS SHOULD REACH THE JOURNAL BY MARCH 10.

Psychiatric Institute Announcement Medical College of South Carolina

The Department of Psychiatry of the Medical College of South Carolina is planning a Psychiatric Institute on April 3 & 4, 1964 to be held at the Medical College of South Carolina, Charleston, South Carolina. Speakers and workshop conductors will include the following:

- | | |
|---|--|
| (1) Frank J. Ayd, Jr., M. D.
Chief of Psychiatry, Franklin Square Hospital,
Baltimore
Faculty of Pontifical Gregorian University, Rome | (4) James A. Knight, M. D.
Professor and Chairman of Psychiatry and
Religion
Union Theological Seminary, New York |
| (2) Vermelle Fox, M. D., Medical Director
Georgian Clinic Alcoholic Rehabilitation Service,
Atlanta, Ga. | (5) Shirley A. Middleton, R. N.
Mental Health Nurse Consultant
Department of Health, Education, and Welfare,
Atlanta, Ga. |
| (3) William G. Hollister, M. D., Chief, Research
Utilization Branch, National Institute of Mental
Health, Bethesda, Md. | (6) Floy Jack Moore, M. D.
Professor and Chairman, Department of Psy-
chiatry
University of Mississippi Medical Center |
| | (7) William F. Sheeley, M. D., Chief APA—GP
Education Project, Washington, D. C. |
| | (8) Others to be Announced. |
- You are cordially invited to attend.

Dr. Sydney S. Gellis

Dr. Sydney S. Gellis, professor of pediatrics, Boston University School of Medicine, will address the Charleston County Medical Society on Tuesday, March 10, 1964, at 8:00 p. m. Dr. Gellis will show a series of color slides and will discuss the subject of "Diagnosis by Inspection."

This should be a very interesting presentation for all those interested in pediatrics. Dr. Gellis, a graduate of Harvard College and Harvard Medical School, has been an instructor in Pediatrics at Johns Hopkins, assistant professor of Pediatrics at Harvard Medical School, and is now professor of pediatrics, chairman of the department of pediatrics, and dean of Boston University School of Medicine. He is also director of pediatrics at the Boston City Hospital and editor of the *Yearbook of Pediatrics*.

Dr. Gellis will spend three days as guest professor in the Department of Pediatrics of the Medical College of South Carolina.

Symposium on Gyn Endocrinology

A one day symposium on Gynecologic Endocrinology and the Stein-Leventhal syndrome will be held in Augusta, Georgia on Thursday, March 19, 1964. The symposium is being sponsored by the local medical society in conjunction with the Medical College of Georgia. There will be no registration fees. Among the participants will be Dr. John Loraine of Edinburgh, Scotland, Dr. Geoffrey Venning of London, England, and Dr. Irving Stein of Chicago, Illinois. Dr. William E. Barfield will moderate the morning session on "Problems of Gynecologic Endocrinology" and Dr. Robert B. Greenblatt the session in the afternoon on "The Stein-Leventhal syndrome." Your attendance is invited.

NURSING EDUCATION TODAY

Educational Programs

J. DECHERD GUESS

GREENVILLE

In the first article of this series, Miss Margaret Bridgman was quoted as follows:

"It is hard to break the habit of thinking of nursing as the same for all who perform it . . . and appropriately prepared for in only one way."¹

Regardless of the difficulty cited by Miss Bridgman, great progress has been made in changing the concept of nursing education from that of a stereotyped formula. There are at present four different basic programs in operation. Each type is varied in detail in different schools.

In 1910 Abraham Flexner wrote of doctors and of medical schools:

The physician is a social instrument The medical school is a public service corporation. It is chartered by the state, it utilizes public hospitals on the grounds of the social nature of its service. The medical school cannot then escape social criticism and regulation. It was left to itself while society knew no better. But civilization consists in . . . gains won by science and experience [and these] have together established terms upon which it can be most useful.

These ideas, here applied to medical schools and education more than half a century ago, can in this later time be applied with equal truth to nurses and schools of nursing education.

There has been operating for ten years or more a concerted effort by leading nurse educators to make effective to nursing education Flexner's ideas regarding medical education. Since 1952, interested and aggressive educators in the field of nursing have been seeking to implement their ideas and philosophy through the National League for Nursing (NLN). This organization includes in its membership several agencies and many individuals interested in the profession of nursing. Its membership includes practicing nurses, practical nurses, nurses aides, and lay people (including doctors), who are interested in the objectives of the League.

Because of the League's widespread, direct and indirect, affiliation with agencies and with leaders in the field of nursing education, it wields a tremendous and far reaching influence.

The basis of my description and discussion of the current basic programs of nursing education in use today is a booklet, "Nursing Education Today" pre-

This is the second of a series of articles dealing with modern nursing and nursing education. The third article will be published in an early issue.

—The Editor

pared by the Division of Nursing Education, NLN.²

There are described four basic programs, namely:

1. That designed to train practical nurses.
2. That of the hospital, or vocational, training course, which leads to a certificate of graduate nurse.
3. The junior, or community, college program, leading to an associate degree in nursing.
4. The college, or university, program leading to a B.S. degree in nursing.

There are also, beyond the baccalaureate program, graduate programs, which lead first to the master's degree and then to the doctorate.

Individual basic programs within each type vary in detail. However, to meet the League's approval each must meet minimum standards set up by it. Thus, there may be a variety of individual differences in each type of program. That fact has given rise to much confusion. The Surgeon General's Consulting Group wrote in its report:⁴

To create order out of the present confusion, we need a careful examination of the systems of nursing education. We also need to determine how these systems can be merged or related in a pattern that will adequately prepare the nurses of the nation to render better patient care and at the same time allow them to advance professionally in an orderly manner. A broad study of the patterns of basic nursing is over due.

In the introduction to NLN's "Nursing Education Programs Today," the following statement is made:⁵

The educational programs described present a picture of such programs in their current stages of development, but it does not set goals, nor is it what anyone thinks it should be. The system of present day nursing education as a whole is a continuing developmental process. Through improvement and reorganization of some types of programs and the addition of others, it has evolved from nursing education of the past.

Miss Bridgman¹ makes the comment, "... the types of programs are complementary to, not rivals of, each other and together draw a due quota of nurses from each of the groups of students in different kinds and levels of education."

However, she believes that there has been an imperative need for a better educational system for increasing the supply of nursing personnel. She writes:

The crisis has been the remarkable nationwide, dynamic movement "to improve nursing education in order to improve nursing services." [As a result]

a functioning and describable system of nursing education has emerged . . . made up of a range of different types of programs . . . Every nurse needs to know more than in the past, but the range of requirements is wide for different kinds and degrees of competences.

NLN develops this last idea more fully:³

Nursing today offers a variety of educational opportunities at different levels. They are:

1. To fulfill all its functions in its service to humanity and provide the best possible care to patients and their families.
2. To meet the people's extensive and constantly increasing need for more nursing services.
3. To match the wide range of nursing functions and the many kinds of careers in nursing.
4. To attract . . . a maximum number of men and women who have different abilities, objectives, and educational preferences.
5. To prepare these students so that each will be useful and find satisfaction in an appropriate nursing role.

There is far from uniformity of thinking regarding the general subject of nurse education. Margaret E. Courteney as late as April, 1963, wrote:²

When there is a change there is often confusion as well, and nursing education is experiencing some of this today. Yet out of change emerge new aims, new policies, new procedures.

Goal Three, proposed at the American Nurses' Association Convention in 1960, reads in part, 'the ANA shall promote the baccalaureate program so that in due course it becomes the basic educational foundation for professional nursing.' . . . Only baccalaureate programs meet all of the essential requirements for professional education.

Acceptance of NLN's Basic Programs

It is a fact that the four basic programs of nursing education are not stereotyped. Nor are they rigidly adhered to by schools of nursing. However, it is also true that the League exerts such a great influence, that its minimum requirements are those required by all schools which receive state approval. Its influence extends even further. State Board examinations for licensure in each of the several states and in several provinces of Canada are prepared and graded by an agency of N.L.N.³ Further, the license to practice in one state, after examination, is not recognized in other states unless the applicant for transfer has attained a grade of at least 350 in NLN's State Board Tests Pool Examination.

In South Carolina, this power over licensure is wielded through the State Board of Nursing, to which in turn is delegated by law the powers of approval or disapproval of schools of nursing, the examination of applicants for license, and the granting or withholding of license. There are five members of the State Board and three of its members are nurse educators, and they and the executive secretary, who wields great influence, are in full accord with the objectives of NLN. Therefore all schools approved

by the Board meet the minimum requirements of the League.

Content of Basic Programs

Each of the four programs is evaluated by NLN as follows:

1. Each has a definite scope, with different requirements and different objectives and each is complete within its scope.
2. All types of nurses are needed and can find satisfactions and can render valuable service in the work for which they are prepared.
3. The best program is that one which best suits the individual, her educational and intellectual attainments, and her career objectives.

Although, each type of basic program has its own distinctive purposes and characteristics, all have some characteristics in common. Each type within its own scope is concerned with the best development of the potentials of the students as persons, citizens, and competent practitioners of nursing. Each includes in proportion to its scope and purpose, foundations in theoretical learning and actual experience in nursing care. In each, a qualified faculty develops, implements, and controls the curriculum within the framework of standards set for that type of program by the League.

Thus it is evident that the League does not favor nor particularly emphasize any one of the four programs as being the ideal program for the training of nurses. Its statements clearly indicate that the program should be fitted to the objectives, the mental ability, and the intellectual attainment of the prospective student. That attitude is wiser, and far more tolerant, than that of the American Nurses' Association referred to earlier.

The basic course in practical nursing centers on direct bedside care and on learning to nurse patients. It includes basic concepts in biological and behavioral science related to the care of selected patients.

Graduates are prepared to give nursing care, under supervision of a registered nurse or a physician, to patients who are relatively free from scientific complexity, and to assist registered nurses in more complicated situations.

Ideally, the training of practical nurses is a continuing one, with progressively increasing competence to handle more complex nursing problems.

The diploma, or hospital, program leads to a diploma or certificate in nursing. It serves the interests and needs of qualified high school graduates who wish an education centered in a hospital and who wish an early and continuing opportunity to be with patients and with personnel who provide health service.

Instruction is given by the school's own faculty, at times augmented by members of the faculty of a cooperating college. The curriculum is designed primarily to prepare the graduates to become nurse practitioners. The primary focus of the training is on nursing care in a hospital. Instruction combines theory and nursing practice.

Graduates of this program understand basic scientific principles of nursing. They are prepared to use those principles in giving nursing care. They recognize signs and symptoms of disease and its complications, and they know how to care for the nursing needs of the patient. They have been trained to communicate their observations regarding the patient to superiors of the health team and to direct lower members of the team. They have understanding and skills necessary to organize and direct a plan of nursing for a hospital unit, and for the direction of other members of the health team.

After receiving a license to practice, they are competent to undertake general duty positions in all hospital wards, to practice industrial nursing, and to work in medical clinics and in doctors' offices. Many graduates with a natural bent for teaching make excellent instructors in the nursing arts. Although, theoretically, graduates of this program are not yet prepared for duty as public health nurses, a great many of them enter public health service and render outstanding service in that field.

The associate degree program offers a correlation of the philosophy and standards of nursing education with those of general education. In the writer's opinion it is deficient in both, and is in fact, a compromise between the program of the hospital school and that of the baccalaureate program.

Associate degree programs are usually offered by community junior colleges. Students in nursing are an integral part of the student body and participate in student body activities. The program is designed to meet the educational ambitions of qualified high school graduates who wish to prepare themselves in a relatively short time (usually two years) for a career in nursing while at the same time working in a cultural educational atmosphere.

The NLN's booklet⁸ says of this program:

Learning experiences in each appropriate clinical situation are prepared as integral parts of the nursing courses . . . Focusing on helping students gain desired objectives, the nursing faculty reduces repetitious practices to a desired minimum. This is done by selecting learning experiences in terms of student needs and program objectives, and by arranging these experiences in nursing courses that closely relate theory and practice.

The ratio of general education and nursing education is developed in accordance with college policy and regulations of the State Board of Nursing.

Graduates of this program have been trained to give patient nursing care as beginning general duty nurses under superior supervisors. They thus cooperate with and share responsibility with a supervisor and other members of the health team in providing for the patient's welfare. Each is encouraged to be self-directive in continuing her learning experience. Some nurse educators refer to the first and even the second year of practice by these students who have become registered nurses as interne years.

The baccalaureate program, leading to a B.S. de-

gree in nursing, after four (or five) years of study in a university school of nursing, is designed to serve the needs of qualified high school graduates who wish an opportunity, "to learn the humanistic and scientific basis for patient care under competent and experienced teaching guidance and to have practice in this care, and who wish to share university life and environment and to receive a baccalaureate education preparatory to teaching or administrative work in nursing schools and hospitals." (By exclusion, it seems to have little or no appeal to young women who wish to render clinical bedside service and nursing supervision.)

The course provides theoretical and practical instruction in nursing along with a modicum of instruction in liberal arts and sciences. It seeks to provide a balance of general and professional education, so coordinated that courses in communicative skills and biological, physical, and social sciences are integrated with advanced courses in nursing.

The courses in nursing are given largely or wholly in the third and fourth years. Included in these are fundamentals of teaching (methodology) and administration as they are related to professional nursing care. They are said to provide an opportunity for:

" . . . cumulative, progressive acquisition of knowledge, understanding, skills, attitudes, judgments, and responsibility for professional competence in practice of any type of nursing."

Graduates of the baccalaureate degree program are (quoting NLN) broadly prepared as practitioners of professional nursing, to give nursing care to people in various settings and to interpret and demonstrate such care to others. They have beginning competence in planning, directing, and evaluating the outcome of nursing care given by associated personnel . . .

They are prepared to function with increasing competence and to be adaptable to change; to develop judgment in assessing nursing situations; and to possess initiative in instigating indicated changes.

The objectives of the baccalaureate program, as they are listed, are most ambitious, comprehensive, and almost awe inspiring. Were they generally attained, it would not be surprising that nurses who have been successfully indoctrinated should assume an air of superiority, arrogance, and often one of scorn toward lesser creatures in the field of nursing and toward physicians, who come in contact with them both in the wards of the hospitals and elsewhere. This they frequently do.

The graduate programs leading to the masters and the doctrinal degrees are not greatly sought after, relatively speaking, and are not available in South Carolina at this time. They provide educational preparation for a selected specialist's role, such as teacher, supervisor, or administrator. The doctorate carries education into the fields of research and ad-

vanced nursing, while providing for improved scholarship.

The author of this article will close the discussion with this observation: Educational advancement may be pursued in any field of knowledge in which one's interests lie. However, before it is determined what an individual's interest is, there have to be preliminary ventures along various paths of learning. These ventures begin in high school and are continued in the college career. Should an interest in the science and art of nursing be developed during the high school year, his advice would be to pursue it further in a

hospital school of nursing where the student gets early a taste of all phases of nursing education and practice. It will be time enough later to elect to go further into the field of nursing education should one be inclined to do so. However, he believes that although work toward higher degrees in nursing is not wasted effort, it is effort which could be better directed in some other and, perhaps, allied field — both for those satisfactions of which nurse educators speak so often, and for advancement of human knowledge, or for service to mankind.

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1. Bridgman, M.: Nursing education today. On types of programs. *Amer J Nurs* 60:1465, 1960.
2. Courteney, M. E.: Nursing education. *Hospitals* 37:139, Apr. 16, 1963.
3. National League for Nursing: Nursing education programs today. 1961.
4. Surgeon General's Consultant Group on Nursing: Toward quality in nursing. (U. S. Public Health Service Publications No. 992) 1963.

News

Greenville County Medical Society

The Nominating Committee proposed the following: President, Dr. H. M. Allison; President Elect, Dr. John K. Webb; Vice President, Dr. Robert M. Dacus; Secretary, Dr. Emmett Bearden; Treasurer, Dr. Marion Waters; Editor of Bulletin, Dr. Donald Kilgore.

Additional Delegate to the South Carolina Medical Association, Dr. Donald Kilgore.

Trustees of Foundation: Dr. Joe Crosland, 1964; Dr. Robert Brown, 1965, replacing Dr. Frank Woodruff; Dr. Jack Parker, 1966; Dr. William Thames, 1967; Dr. Robert Thomason, 1968, replacing Dr. Henry Ross.

These gentlemen were unanimously elected by acclamation.

The following were voted into membership of the Society: Dr. Joseph O. Smith, Pediatrician, Greer, South Carolina; Dr. Forest Kay Huntington, Internist, practicing in association with Dr. John Muller; Dr. James Richardson, General Practice, Simpsonville, South Carolina.

Baker Medical Staff Headed By Dr. Evans

Dr. M. Grayson Evans has been elected chief of the medical staff of Baker Memorial Hospital, Charleston.

Other officers of the medical staff elected are Dr. Donald W. Anderson, vice chief; Dr. Robert J. Baker, secretary; and Dr. Oscar S. Reeder and Dr. Maxwell R. Anderson, executive committee members.

Clinical Center Study of Pinealoma

The cooperation of physicians is requested in a study of children patients with pinealoma, being conducted by the National Institute of Mental Health at

the Clinical Center, National Institutes of Health in Bethesda, Maryland.

Hospitalization of the patients in the Clinical Center is not necessary, and they will not have to be examined here. Instead, a brief medical history including pertinent information about the child's gonadal development is requested. If surgery is performed on the patient, a piece of the tumor tissue (which has been frozen soon after removal) would be useful. A urine specimen may be needed from selected patients.

Physicians who are interested in contributing information about their patients for this study may phone or write to:

Richard J. Wurtman, M. D.
Laboratory of Clinical Science
National Institute of Mental Health
National Institutes of Health
Bethesda, Maryland 20014
Telephone: 49-62457 (area code 301)

Four-Day Meeting for Doctors and Nurses, March 16-19, 1964, New Orleans

Surgeons and graduate nurses are invited to the tenth annual joint meeting of the American College of Surgeons in New Orleans, March 16-19, 1964. Headquarters hotel for doctors will be the Roosevelt, and for nurses the Jung.

This is the College's only four-day meeting for 1964, and the only meeting with a program for nurses.

Georgia Society of Ophthalmology and Otolaryngology

The annual meeting of the Georgia Society of Ophthalmology and Otolaryngology will be held

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ly liquefying secretions in the
respiratory tree, Cheracol makes it easier
for the patient to cough—in accord
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Upjohn

March 19, 20 and 21, 1964 at Callaway Gardens,
Pine Mountain, Ga.

The guest Eye speakers will be Dr. Irving H. Leopold, Philadelphia, Pa., Dr. John McLean, New York, N. Y. and Dr. M. A. Galin, New York, N. Y. The guest ENT speakers will be Dr. Walter P. Work, Ann Arbor, Michigan, Dr. George Reed, Boston, Mass. and Dr. Jack V. Hough, Oklahoma City, Okla.

Universal Medical Identification Symbol

This is the universal emergency medical identification symbol devised by the American Medical Association.



The person who displays it carries information which should be known to anyone helping him during an accident or sudden illness.

First announced in June, 1963, this symbol is already in such general use that it is essential that it be recognized by all emergency personnel who care for the ill or injured. It means, "Look for medical information that can protect life." Failure to recognize this symbol and to heed its vital message could be disastrous.

This symbol has been freely offered by the A.M.A. to manufacturers and distributors of emergency medical signal devices and the publishers of medical identification cards. Thirty corporations and associations have adopted the universal symbol for use on their identifications and the number is increasing continuously. The A.M.A. neither manufactures nor distributes signal devices.

The signal device should carry as minimum information the emergency medical identification symbol on one side and on the other, in very few words, the most important information for those who might provide aid in an emergency. It is also helpful to include the names and phone numbers (including area code) of the nearest of kin, another relative or close friend, or one's personal physician.

Where To Obtain Cards and Devices

Identification cards are distributed by many national as well as local health agencies. The American Medical Association distributes one. Single copies are free on request. Quantities can be purchased from the AMA at \$1.00 per hundred, \$5.00 per thousand.

Many organizations and manufacturers sell durable signal devices for emergency medical identification.

Dr. J. A. Hard

Dr. J. A. Hard opened Kershaw's fourth medical office on December 9.

Dr. Hard came to Kershaw from Bethune, was born in Charleston, graduated from The Citadel and the Medical College of South Carolina (1955.) He did his internship at the Charleston Medical Center and served two years in the Army.

Manual on Heart Failure

A new Public Health Service publication *Congestive Heart Failure: A Guide For The Patient*, describes in non-technical terms the causes, process, treatment, and management of congestive heart failure. A completely revised edition of *Understanding The Management of Congestive Heart Failure* presents similar material for nurses and other health agency personnel.

The patient guide explains the rationale behind digitalis, diuretic and diet therapy as well as the relationship of physician activity and emotional upset to cardiac output. Ways in which the patient can help himself to stay well and the danger signals of congestive failure are listed. The fact that it is possible for people with congestive failure to lead "relatively normal and useful" lives is emphasized.

The guide is available for general distribution through the Superintendent of Documents, Government Printing Office, Washington 25, D. C., at 10¢ a copy, \$5.00 per 100 copies.

Single copies of both booklets are available without charge, from the U. S. Public Health Service, Washington 25, D. C.

State Board of Medical Examiners of South Carolina Columbia, South Carolina

The State Board of Medical Examiners of South Carolina met in Columbia, South Carolina on November 12, 1963 to interview applicants for medical licensure by endorsement of credentials. Twenty-seven physicians had completed their applications and have been licensed to practice medicine and surgery in the state of South Carolina. They are as follows:

Dr. Robert L. Baucom is a 1960 graduate of the Univ. of N. C. and is licensed in North Carolina. He was recently released from service and is in general practice at the South Carolina State Hospital.

Dr. Lewis R. Beam, Univ. of N. C. graduate (1958), is licensed in North Carolina. He was released from the U. S. Navy in July and is now in general practice in Grover, North Carolina.

Dr. James E. Bleckley graduated from Emory Univ. in 1955. He is licensed in several states and has served a residency in medicine. He is in the practice of internal medicine in Anderson.

Dr. James A. Boykin, a '60 graduate of Howard, is licensed in Maryland and the District of Columbia. He has training in otolaryngology. He is currently in general practice in Lancaster.

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Dr. Norman Cardoso graduated from Tufts Univ., '59, and has certificates from the National Board and Mass. He is an otolaryngologist and is in the U. S. Navy at the Naval Hospital in Beaufort.

Dr. Eugene C. Crisler graduated from L. S. U. in 1956; he is licensed in Louisiana. Dr. Crisler is a radiologist and his office is located in Augusta, Ga.

Dr. D. Charles Dixon is a '46 graduate of Univ. of Pittsburgh. He was recently retired from the U. S. Navy; he is licensed in Pa., Tex., and Ala. He has served a residency in obstetrics and gynecology. He recently moved to Charleston.

Dr. Charles Freeman, Jr. graduated from the Med. College of Ga. in 1949 and took a residency in orthopedic surgery. He is licensed in Georgia and maintains his office in Augusta.

Dr. Chester R. Goddard is a '41 graduate of Univ. of Iowa. He is licensed in Iowa and is in the practice of internal medicine in Iowa City. He plans to move to Hilton Head in about a year.

Dr. Cary C. Hodnett graduated in 1962 from the Univ. of Ala., and is licensed in Ala. He is currently in the U. S. Navy and is stationed in Charleston.

Dr. Robert M. Howard, Duke, class of '56, is licensed in North Carolina and Georgia. He is a pathologist and at present practices in Savannah, Georgia.

Dr. Forrest K. Huntington, Univ. of Rochester, '55 graduate, is licensed in North Carolina. He took residency training in internal medicine and he is now in practice in Greenville.

Dr. William B. Jones is a '54 graduate of Duke Univ. and is licensed in N. C. He served a residency in orthopedic surgery. He is now in the U. S. Air Force, stationed at Keesler A.F.B., in Mississippi, he plans to practice in Rock Hill at a later date.

Dr. Harry E. Logue, Med. Coll. of Ga., class of '63, is licensed in Georgia. He is in an internship in Augusta and will do general practice in New Ellenton.

Dr. Needham L. Long graduated from the Med. Coll. of Ala. in '56 and is licensed in Ala. He is board certified in pathology and is in practice in Columbia.

Dr. Dail W. Longaker graduated from the Univ. of Virginia, class of '55, and is licensed in Virginia. He is board eligible in thoracic surgery and practices in Columbia.

Dr. Christopher H. Magruder, a '58 graduate of Tulane Univ., is licensed in Nebraska. He has served a residency in pathology and is in practice in Greenwood.

Dr. Robert K. Moxon, a '43 graduate of the Univ. of Pa., is licensed in Pa. He is board certified in internal medicine. He retired this year from the U. S. Navy and is now Dir. of Medical Ed. at Columbia Hospital.

Dr. C. Mason Quick graduated from Howard Univ. in 1945. He is licensed in N. C. and D. C. He took residency training in ophthalmology and otolaryngology; he practices in Fayetteville, N. C.

Dr. Robert S. Shacklett, a '55 graduate of Univ.

of Tenn., is licensed in Tenn. and N. C. He is trained in pathology and is in practice in Shelby, N. C.

Dr. George A. Sowell graduated from Univ. of Md., class of '56. He is licensed in Md. He completed a residency in obstetrics and gynecology; he now practices in Orangeburg.

Dr. Charles P. Summerall, 3rd, graduated from Harvard Med. Sch. in 1955. He has certificates from the National Board and La. He is an instructor in medicine at the Med. Coll.

Dr. William G. Sutlive, a '55 graduate of Med. Coll. of Ga., is licensed in Ga., Md., and La. He took a residency in obstetrics and gynecology and practices in Savannah, Ga.

Dr. Robert J. Swan is a '61 graduate of Univ. of Iowa and is licensed in Iowa. He is currently with the U. S. Navy in Charleston.

Dr. Richard L. Vaught, Ind. Univ., class of '58, is licensed in Indiana. He served a residency in urology. Dr. Vaught is now in the U. S. Navy, stationed in Beaufort.

Dr. Charles R. Webb, Jr., a '57 graduate of Western Reserve Univ., is licensed in Ohio. He served a residency in public health and is now in the U. S. Army at Fort Jackson.

Dr. Julian R. Youmans, Emory Univ., class of '52, is licensed in Ga. and several other states. He is board certified in neurosurgery and is on the staff of the Medical College.

New Resus-O-Kit Soon To Be Available

A new emergency cardiac arrest kit that will be of special interest to hospitals, physicians and emergency rooms is now available.

Coronary thrombosis, drowning, electrical shock, gas poisoning, suffocation, and other accidents often result in *cardiac arrest* and quite often the necessary drugs, syringes, and medicines are not handy or assembled in a manner to enable prompt treatment of the cardiac arrest patient.

The Resus-O-Kit is described as a complete emergency tray designed for immediate availability of the necessary drugs, syringes, air way, and essential elements needed in managing cardiac arrest. The kit is "color coded" to allow easy inspection by floor nurses and supervisors to keep everything in order and refilled. For those physicians who are not frequently associated with such situations there is a chart on the inside cover with a suggested outline of procedure. The kit is to be used only by physicians and is obtainable only upon their direct request.

Descriptive materials concerning the Resus-O-Kit may be obtained by writing your Heart Association State Office.

Mass Casualty Courses

Under the quota allotted the AMA Council on National Security, four spaces are open for civilian physicians to attend a course in the Medical Management of Mass Casualties to be conducted by the Medical Field Service School, Brooke Army Medical Center, Fort Sam Houston, Texas, on April 6-10, 1964.

Physicians desiring to attend this course under this quota should write to the AMA Council on National Security, 535 N. Dearborn St., Chicago, Illinois, 60610 no later than February 15, 1964.

Dr. Jean Morgan Is Named To Doctors Group

Dr. Jean McNeil Morgan of the Medical College of South Carolina has been elected to the American College of Physicians.

Formerly of the Medical College of Alabama, Dr. Morgan joined the staff of the hospital November 1. Interested in renal diseases, she is concerned with research and the explanation or bio-chemical basis for some of the changes during uremic poisoning that cause illness.

Mental Health Association Annual Meeting

Dr. Ramsey Mellette, Jr., from the Medical College of South Carolina was keynote speaker at the Annual Meeting of the Mental Health Association.

York County Health Center

The York County Health Center was to be ready for occupancy January 1.

Construction of the \$83,000 one-story building began last June. It will replace the county's health offices in the basement of the York County Courthouse.

Greenville General Hospital Staff

The announcement of the 1964 officers for the medical and dental staff at Greenville General Hospital was made at the quarterly meeting of the staff by Robert E. Toomey, hospital director.

Dr. Willard Hearin will assume the office of president, effective January 1.

Other new officers include Dr. William Craig, vice president and president-elect, and Dr. Peter Manos, secretary.

S. C. Chapter of the American College of Surgeons

The South Carolina Chapter of the American College of Surgeons will meet with the Richland County Medical Society at the Wade Hampton Hotel, Columbia, South Carolina, March 9, 1964, at 9:30 a. m. The theme of the meeting is CANCER.

The out-of-state speakers will be Murray M. Copeland, M. D., Houston, Texas, on "Lesions of the Breast;" J. D. Martin, M. D., Atlanta, Georgia, on "Carcinoma of the Thyroid;" and Joseph H. Ogura, M. D., St. Louis, Missouri, on "Carcinoma of the Pharynx and Larynx."

The members are urged to attend and all interested members of the medical profession will be welcome.

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Coastal Medical Society

The Coastal Medical Society met January 16, 1964 in Walterboro. Dr. William Lee of Charleston spoke on "Evaluation of Patients for Cardiac Surgery."

Lexington Plans

According to Senator Francis C. Jones, the 1964 prime matter of concern for the Lexington County legislative delegation will be the construction of a 112-bed hospital.

Columbia Society Officers

Dr. Buford S. Chappell was elected President-Elect of the Columbia Medical Society at the annual meeting for the election of officers on December 9, 1963. Other officers were Dr. Kirby D. Shealy, Vice-President; Dr. Richard C. Slocum, Secretary; Dr. Marion Hook, Treasurer; and Dr. Thomas E. Edwards, Editor of The Recorder.

Dr. Rudolph Farmer, named President-Elect in 1962, will become the Society's 1964 President.

Five Physicians Cited

Five South Carolina physicians have been designated as fellows and associates of the American College of Physicians.

They are Drs. John F. Buse, Jr., and William M. Lukash of Charleston, Dr. Roy A. Howell, Jr., of Bennettsville, and Drs. Donald E. Saunders, Jr., associates, and Charles R. Holmes of Columbia, fellow.

Dr. Strait Elected

The York County Medical Society has elected Dr. W. F. Strait, III president.

Other officers elected were Dr. George Adickes,

vice president, and Dr. Roderick Macdonald, secretary and treasurer.

Dr. A. J. Reinovsky

Dr. A. J. Reinovsky, Pickens physician, was honored at "Doctor Reinovsky Day" at Miracle Hill Mission Friday, December 20, when friends gathered for a testimonial dinner.

Dr. Griffin To Serve Hospitals

Dr. John E. Griffin comes to Marion from Dallas, Texas, to assume the position of radiologist in the Marion County Memorial Hospital and The Finger Clinic, Marion, the Mullins Hospital in Mullins, and at St. Eugene's Hospital, Dillon.

Dr. Griffin has recently finished his radiology residency at Baylor University Medical Center.

He was born in Texas, and attended Hardin-Simmons University in Abilene in 1943 thru 1945. Service in the U. S. Army occupied Dr. Griffin in 1946 and 1947.

He practiced pharmacy in Abilene after getting his B. S. degree in pharmacy from the University of Texas in 1948. In 1952 he entered the University of Texas Southwestern Medical School, and was graduated in 1956. He served his internship at Methodist Hospital in Dallas in 1956 and 1957. Following this, he was engaged in the general practice of medicine in Winters, Texas for four years.

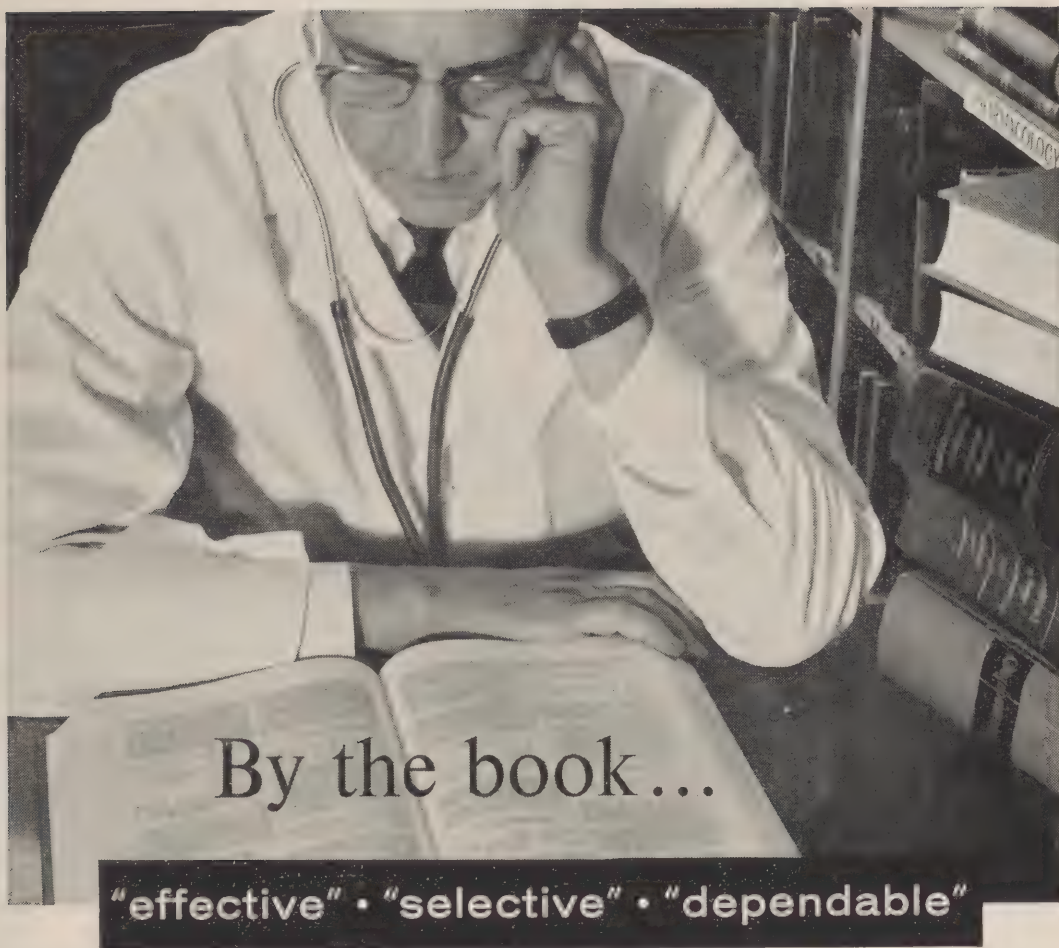
L. W. Luttrell

Dr. Lloyd W. Luttrell, chief of staff at Spartanburg General Hospital, was honored as "Doctor of the Year" by the Spartanburg County Medical Society during its annual Christmas party at the Spartanburg Country Club.

MEDICAL TELEVISION

Future programs:

February 20th	—5:00-6:00 P. M. —RENAL DISEASE, PART II (by The New York Academy of Medicine).
March 5th and 6th	—8:00-9:30 P. M. —DIABETES.
March 19th	—5:00-6:00 P. M. —VIRUSES AND UPPER RESPIRATORY INFECTION (by The University of Utah).
April 9th and 10th	—8:00-9:30 P. M. —CLINICAL PATHOLOGICAL CONFERENCE.
April 16th	—5:00-6:00 P. M. —To be announced.
May 14th and 15th	—8:00-9:30 P. M. —STROKES.
May 21st	—5:00-6:00 P. M. —To be announced.



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Book Reviews



**HANDBOOK OF PEDI-
ATRIC MEDICAL
EMERGENCIES**, by A. G.
DeSanctis, M. D., and
Charles Varga, M. D. 3rd
Edition. C. V. Mosby Co.,
St. Louis. 1963. Price
\$12.75.

This is a much enlarged book as compared to the first two editions. In general, the cardiovascular and metabolic chapters have been completely re-written, many others revised. Two new chapters have been inserted; Emergencies of the Newborn and Psychiatric Emergencies. There is a table of dosages of drugs used in emergencies in the appendix.

My first impression was that the book had become too bulky and detailed to be handy. However, on further inspection many of the additions concern information not readily available in other sources. The extensive and detailed discussion of fluid and electrolyte problems is very good, and contains much useful information in table form as well. The section on Newborn Emergencies is worthwhile information, especially dosages of drugs for newborns.

The book still has its excellent appendage in which common household poisons are listed by trade name or by common name.

I believe this book to be a worthwhile addition to the library of any practicing pediatrician or general practitioner.

Walton L. Ector, M. D.

PROGRESS IN HEMATOLOGY, Volume III.
By Leandro M. Tocantins, M. D. 384 pages. Grune
and Stratton, New York. 1962. \$16.50.

The tremendous strides made in all branches of hematology in the past few years have made it virtually impossible for the average physician to stay abreast of the current literature in this field. For this reason, it is extremely helpful to have a review of these newer concepts so ably chosen and presented as is done in this volume.

This is the third symposium edited by Dr. Tocantins and his 25 contributors have very effectively covered a wide field. The hematological manifestations of radiation in exposure in man, which is now important to all physicians, are well reviewed by Dr. Walk *et al.* This discusses not only patient or physician exposure, but problems which would be important in nuclear warfare.

Dr. Pankerdt has described the newer concepts of red cell metabolism and the mechanisms of various forms of hemolytic anemia resulting from aberrations in the enzymes of the red cell. The origin, life span and mode of destruction of both the white cells and platelets are reviewed, giving a good understanding of diseases of these elements.

Dr. Sol Sherry, one of the most prolific investigators in the field of fibrinolysis, covers the therapeutic applications of these agents. His conclusions tend to make one question the extravagant claims of some of the drug houses and this paper would be of interest to all clinicians.

This volume seems much more representative than either Volume I or II and can be recommended to all practicing physicians for perusal and reference.

Charlton deSaussure, M. D.

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Tega-Cycline . . . offers 250 mg. Tetra-
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Tega-Cycline . . . offers the utmost in
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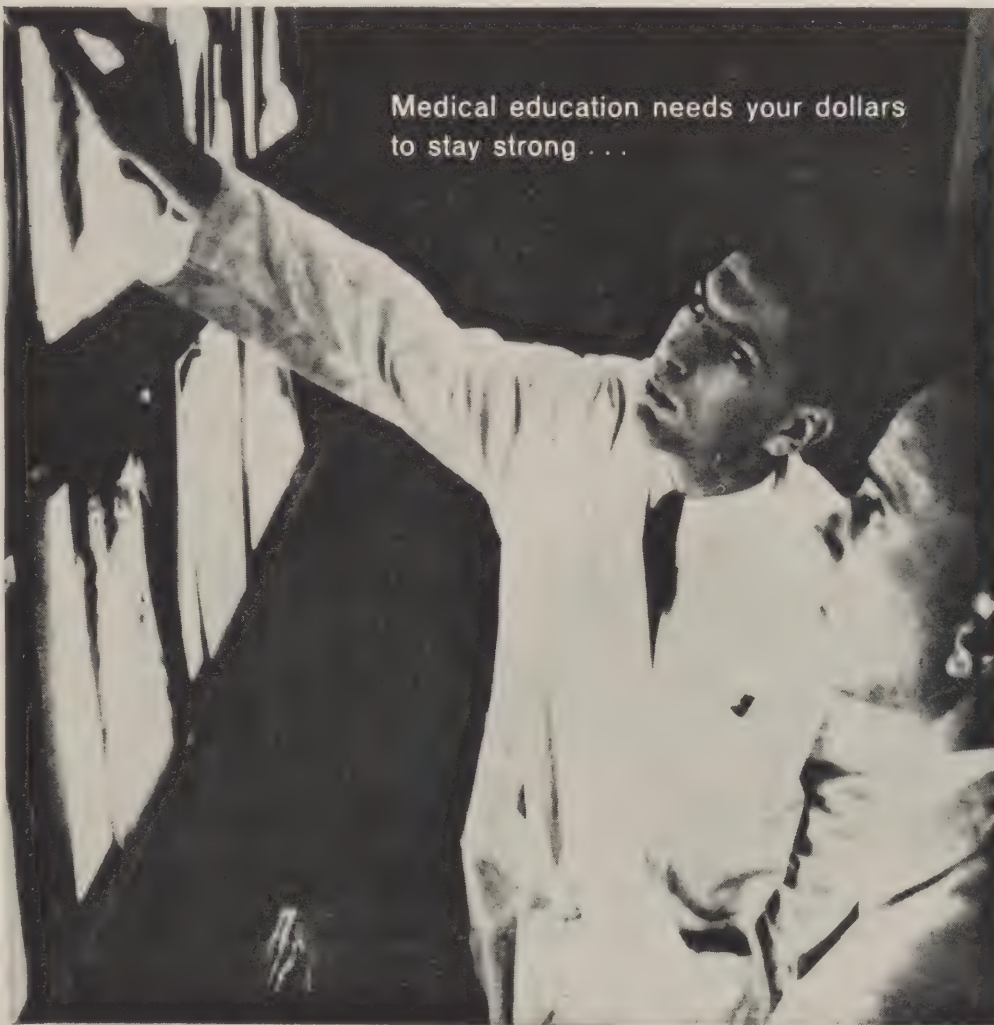
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who were the “untreatables”?

From their inception with cortisone, to the present-day variants of the steroid molecule, the corticosteroids have presented a therapeutic paradox. The beneficial action against inflammation and allergy as well as several undesirable metabolic effects are all, apparently, the results of the same basic physiologic action.¹

Some of these associated metabolic reactions made it risky or otherwise undesirable to treat with steroids large numbers of patients in various categories who would otherwise have benefited from such management. These “untreatables” were overweight, had cardiac disease, hypertension, or pulmonary fibrosis associated with congestive heart failure. Also in this category were those patients whose emotional symptoms were aggravated by earlier steroids.

But the advent of ARISTOCORT® Triamcinolone in 1958—the result of biochemical and pharmacologic research which successfully stripped away many important undesirable hormonal effects from the primary anti-inflammatory action—dramatically changed this picture. This steroid did not overstimulate the appetite, or cause the excessive weight gain induced by other steroids;²⁻⁷ it proved to have one of the best records of any steroid for *not* causing edema, or salt-and-water retention;^{2,3,7-10} and the incidence of undesirable euphoria with this agent was remarkably low.^{2,4,5,9,10} What is most significant is that these benefits have stood the test of more than 5 years of widespread use. And, of course, the avoidance of these distressing hormonal effects benefited *all* patients requiring steroids, not just those in the special categories, as demonstrated by wide clinical use.

Side Effects. Since it may, under some circumstances, produce any of the unwanted effects common to all cortisone-like drugs, discrimination should always be exercised in administering ARISTOCORT® Triamcinolone. Any of the Cushingoid effects are possible, as are purpura, G.I. ulceration, increased intracranial pressure and subcapsular cataract. Corticosteroids generally may mask outward signs of bacterial or viral infections. Catabolic effects to watch for include muscle weakness and osteoporosis. Weight loss may occur early in treatment but is usually self-limiting.

Contraindications. While the only absolute contraindications are tuberculosis and herpes simplex, there are some relative contraindications (peptic ulcer, glomerulonephritis, myasthenia gravis, osteoporosis, fresh intestinal anastomoses, diverticulitis, thrombophlebitis, psychic disturbance, pregnancy, infection) to weigh against expected benefits.

While no steroid can *cure* a susceptible disorder, many patients who would otherwise be confined in a state of invalidism have, on ARISTOCORT® Triamcinolone, been able to pursue active, useful lives.

References: 1. Levine, R.: Rationale for the Use of Adrenal Steroids, Paper presented at Annual Convention, Medical Society of the State of New York, New York, May 13-17, 1963. 2. Hollander, J. L.: Clinical Use of Dexamethasone. *JAMA* 172:306 (Jan. 23) 1960. 3. Boland, E. W.: Chemically Modified Adrenocortical Steroids. *JAMA* 174:835 (Oct. 15) 1960. 4. McGavack, T. H.: The Newer Synthetic Adrenocortical Steroids in Therapy. *Nebraska Med. J.* 44:377 (Aug.) 1959. 5. Freyberg, R. H.; Berntsen, C. A., Jr., and Hellman, L.: Further Experiences with $\Delta 1, 9$ Alpha Fluoro, 16 Alpha Hydroxyhydrocortisone (Triamcinolone) in Treatment of Patients with Rheumatoid Arthritis. *Arthritis Rheum.* 1:215 (June) 1958. 6. Cahn, M. M. and Levy, E. J.: Triamcinolone in the Treatment of Dermatoses. *Amer. Practit.* 10:993 (June) 1959. 7. AMA Council on Drugs: New and Nonofficial Drugs. *JAMA* 169:255 (Jan. 17) 1959. 8. McGavack, T. H.; Kao, K.-Y. T.; Leake, D. A.; Bauer, H. G., and Berger, H. E.: Clinical Experiences with Triamcinolone in Elderly Men. *Amer. J. Med. Sci.* 236:720 (Dec.) 1958. 9. Fernandez-Herlihy, L.: III. Use and Abuse of Corticosteroid Therapy—The Structure and Biologic Activity of the Corticosteroid Hormones and ACTH. *Med. Clin. N. Amer.* 44:509 (Mar.) 1960. 10. McGavack, T. H.: Triamcinolone: A Potent Anti-inflammatory Sodium Excreting Adrenosteroid. *Clin. Med.* 6:997 (June) 1959.

maximum steroid benefit—minimum steroid penalty

Aristocort[®]

Triamcinolone

1 mg., 2 mg. or 4 mg. tablets



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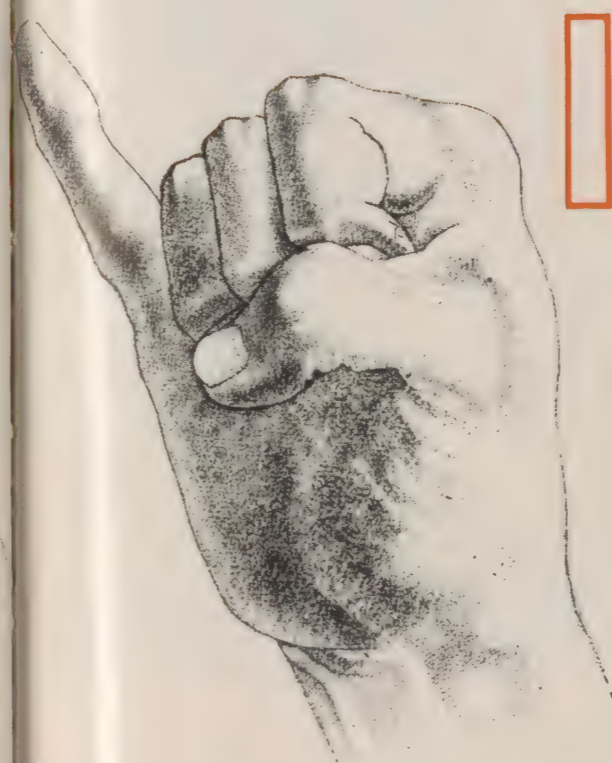
ARTHRALGEN® helps free arthritic joints from



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A



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ARTHRALGEN®

Each tablet contains:

Salicylamide.....	250 mg.
Acetaminophen.....	250 mg.
Ascorbic acid (Vitamin C).....	25 mg.

Arthralgen, a better-tolerated analgesic formulation of time-tested ingredients, works faster to free the arthritic from his pain without salicylate side effects. Since its analgesic components require no chemical conversion to act in the body, Arthralgen's pain relieving benefits are immediately available to provide a smoother, more rapid obtundation of pain than can be achieved with many true salicylates.

Arthralgen is especially useful for the prompt relief of early morning stiffness and pain with less risk of gastric irritation. And since Arthralgen contains no sodium it is safe for long-term use in

arthritics who have other conditions which necessitate sodium restriction.

ARTHRALGEN®-PR

Each tablet contains:

Salicylamide.....	250 mg.
Acetaminophen.....	250 mg.
Ascorbic acid (Vitamin C).....	25 mg.
Prednisone.....	1 mg.

The basic Arthralgen formulation plus prednisone is indicated for patients who require steroids. Prednisone has three advantages over cortisone, hydrocortisone, and ACTH. They are: (1) lack of sodium retention, (2) absence of increased potassium excretion, and (3) the unlikelihood of steroid-induced hypertension.*

BRIEF SUMMARY

Arthralgen and Arthralgen-PR are indicated in the management of rheumatoid arthritis, acute

gouty arthritis, rheumatoid spondylitis, osteoarthritis, bursitis, fibrositis, and neuritis. Arthralgen may be used for analgesia in colds, flu, and various myalgias.

DOSAGE: One or two tablets four times a day. After remission of symptoms, dosage should be reduced to the minimum maintenance level.

SIDE EFFECTS: Nausea, GI upset, or mild salicylism may rarely occur. Symptoms of hypercorticism dictate reduction of dosage of Arthralgen-PR.

PRECAUTION: Reduction in dosage of Arthralgen-PR given over a long period should be gradual, never abrupt.

CONTRAINDICATIONS: Hypersensitivity to any ingredient.

As with any drug containing prednisone, Arthralgen-PR is contraindicated, or should be adminis-

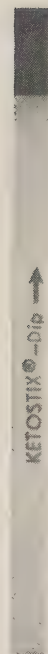
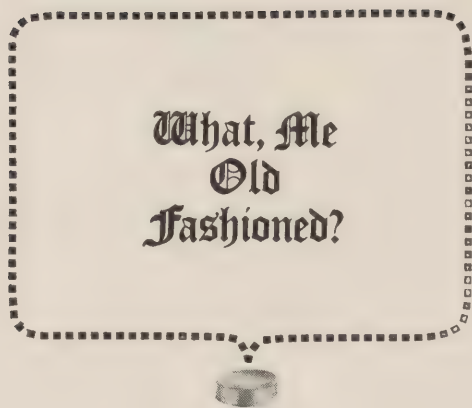
tered only with care, to patients with peptic ulcer, tuberculosis, nephritis, diabetes mellitus, acute psychoses, Cushing's syndrome (or Cushing's disease), overwhelming spreading (systemic) infection, or predisposition to thrombophlebitis.

Arthralgen-PR is generally contraindicated in patients with uremia and viral infections, including poliomyelitis, vaccinia, ocular herpes simplex, and fungus infections of the eye. It is also contraindicated in patients with chicken pox or susceptible persons exposed to it.

SUPPLY: Arthralgen (white, scored) and Arthralgen-PR (yellow, scored) tablets are available in bottles of 100 and 500.

*Cohen, et al: J.A.M.A., 165:225, 1957.

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Don't feel sorry for **ACETEST**® Reagent Tablet — It still does a good job. But new, improved **KETOSTIX**® “dip-and-read” test for ketone bodies in urine; serum, or plasma, is more convenient. It's faster (only 15 seconds) and more sensitive. When you use **KETOSTIX** Reagent Strips you don't even need a medicine dropper. Simply dip and read **KETOSTIX** and get a more definitive detection of ketone bodies. Still like **ACETEST** Reagent Tablets? That's okay, but remember, we said, “**KETOSTIX** Reagent Strips are more modern.” □ Ames Company, Inc., Elkhart, Indiana.



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In Sprains, Strains and Muscle Spasm, 'Soma' Compound numbs the pain...not the patient

**A potent analgesic and
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1. A sprain or fracture is not a big clinical problem—but it does hurt. And if there is housework to do and kids to mind, the patient needs something to numb the pain.

2. A.P.C. compounds have limited usefulness; and the patient can buy them without your prescription. Unfortunately, most of them are too mild to be effective for sprains—and more potent products too often make the patient feel 'dopey'.

3. 'Soma' Compound is ideal in these cases. Since it contains both 'Soma' (carisoprodol) and acetophenetidin it is both a potent analgesic and a superior muscle relaxant; it also contains caffeine to offset any drowsiness (*"numbs the pain...not the patient"*).

4. Why not try 'Soma' Compound? Dosage is 1 or 2 tablets q.i.d. For more severe pain, try 'Soma' Compound + Codeine. Dosage: 1 or 2 tablets q.i.d.

5. Hypersensitivity to carisoprodol may occur rarely. Codeine may produce addiction, nausea, vomiting, constipation or miosis.

Soma[®] Compound

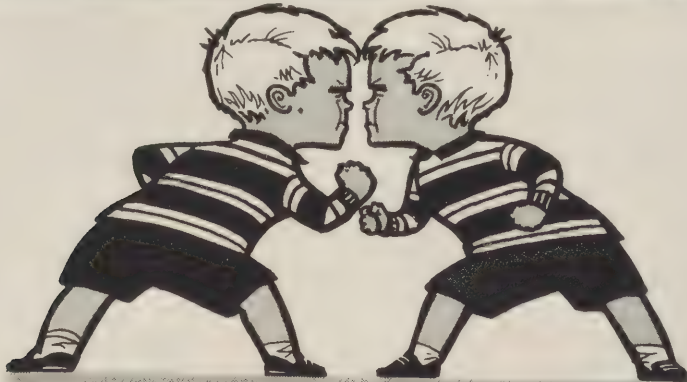
carisoprodol 200 mg., acetophenetidin 160 mg., caffeine 32 mg.

Soma[®] Compound + Codeine

carisoprodol 200 mg., acetophenetidin 160 mg., caffeine 32 mg.,
codeine phosphate 16 mg. (Warning—may be habit forming.)

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COPING WITH THE DOUBLE TROUBLE OF A COLD



MEDCOHIST for Relief of Congestion

Medcohist, in easy-to-take tablet form, is the reliable "one-two punch" for relief from the discomfort of common colds, flu, and sinusitis. This antihistaminic/analgesic formula is truly effective in the treatment of nasal drip and stuffiness, respiratory congestion and related aches and pains. CAUTION: Medcohist may cause drowsiness. Sold by prescription only. Please consult PALMEDICO literature for formula, dosage, possible side effects, and contraindications.

*Also Available **MEDCOHIST 1/4** with Codeine*



MEDITUSSIN for Relief of Cough

Meditussin is the effective antitussive/antihistaminic formula with Dihydrocodeinone for narcotic therapy in acute, severe and refractory coughs. It is also an efficient expectorant. Pharmacologically more active than Codeine, Dihydrocodeinone also has less tendency to produce constipation, nausea and drowsiness. CAUTION: Federal law prohibits dispensing without prescription.

*Also Available **MEDITUSSIN X** Exempt Narcotic for Children*



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NEW!

*Around the clock
relief for*
**DISTRESS OF
COLDS**

ISOCOLOR[®] TIMESULE[®]

EACH ISOCOLOR TIMESULE CONTAINS:

Chlorpheniramine maleate 10 mg.
d-Isoephedrine HCl 65 mg.
In a special form providing prolonged
therapeutic effect.

A NEW COMPREHENSIVE RELIEF

- Relief usually starts in minutes—to open nasal passages, stop running nose and eyes, sneezing, wheezing, itching and post-nasal drip
- Relief usually lasts up to 12 hours with a single oral dose
- Gives both upper respiratory decongestion and bronchodilatation to relieve chest discomfort
- With minimal drowsiness, CNS or pressor stimulation



**ALSO AVAILABLE:
ISOCOLOR TABLETS
AND LIQUID.**

MADE POSSIBLE BY THE NEW TIMESULE RELEASE MECHANISM

Release with the Isocolor Timesule is at a relatively even, constant rate, independent of gastrointestinal motility, pH, or enzymatic activity. Each Timesule pellet is actually a micro dialysis cell, consisting of a drug core with coating of dialyzing membrane of precisely controlled permeability. Approximately 20% of active drugs are released within one hour and 80% in 8 hours. Peaks and valleys of over-release and under-release are minimized for constant, controlled relief with minimum side effects.

DOSE: Adults: One Timesule every 12 hours, or as directed.

WARNING: Use with caution in patients suffering from hypertension, cardiac disease, hyperthyroidism or diabetes. Patients susceptible to the soporific effect of chlorpheniramine should be warned against driving or operating machinery should drowsiness occur.

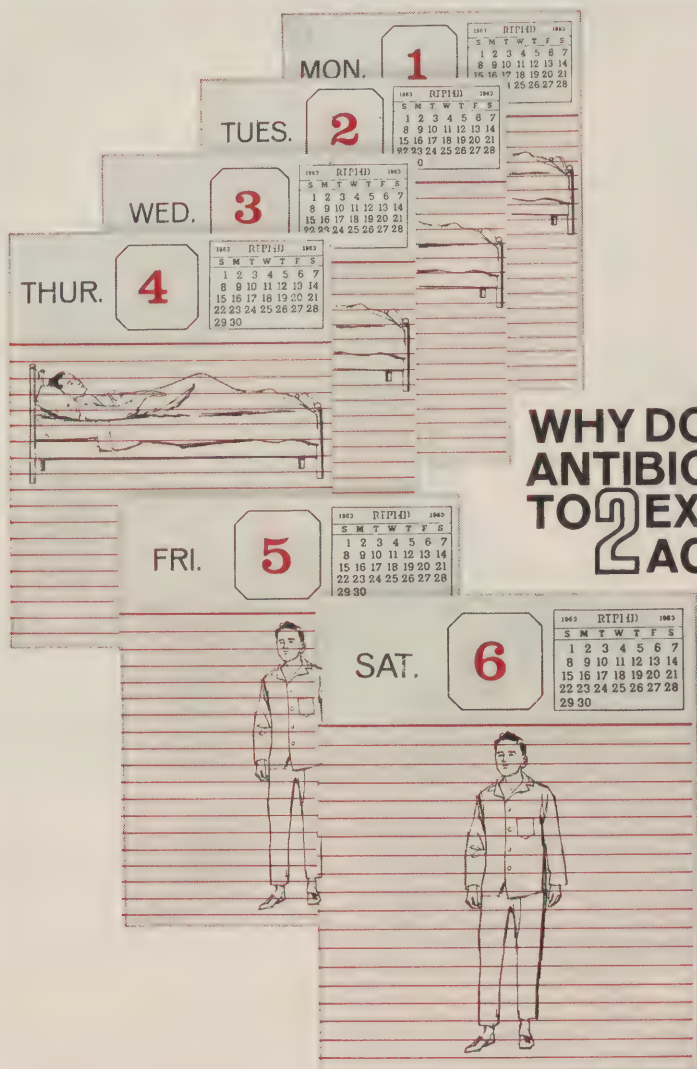
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WHY DOES ONE
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TO **2** EXTRA DAYS'
ACTIVITY?

Because it is more resistant to disintegration, has a lower renal clearance rate than earlier tetracyclines¹... a favorable depot effect resulting from protein binding and greater mg. potency... all giving higher, sustained *in vivo* activity which continues long after the last dose.

DECLOMYCIN[®]

DEMETHYLCHLORTETRACYCLINE HCl

Effective in a wide range of everyday infections—respiratory, urinary tract and others—in the young and aged—the acutely or chronically ill—when the offending organisms are tetracycline-sensitive.

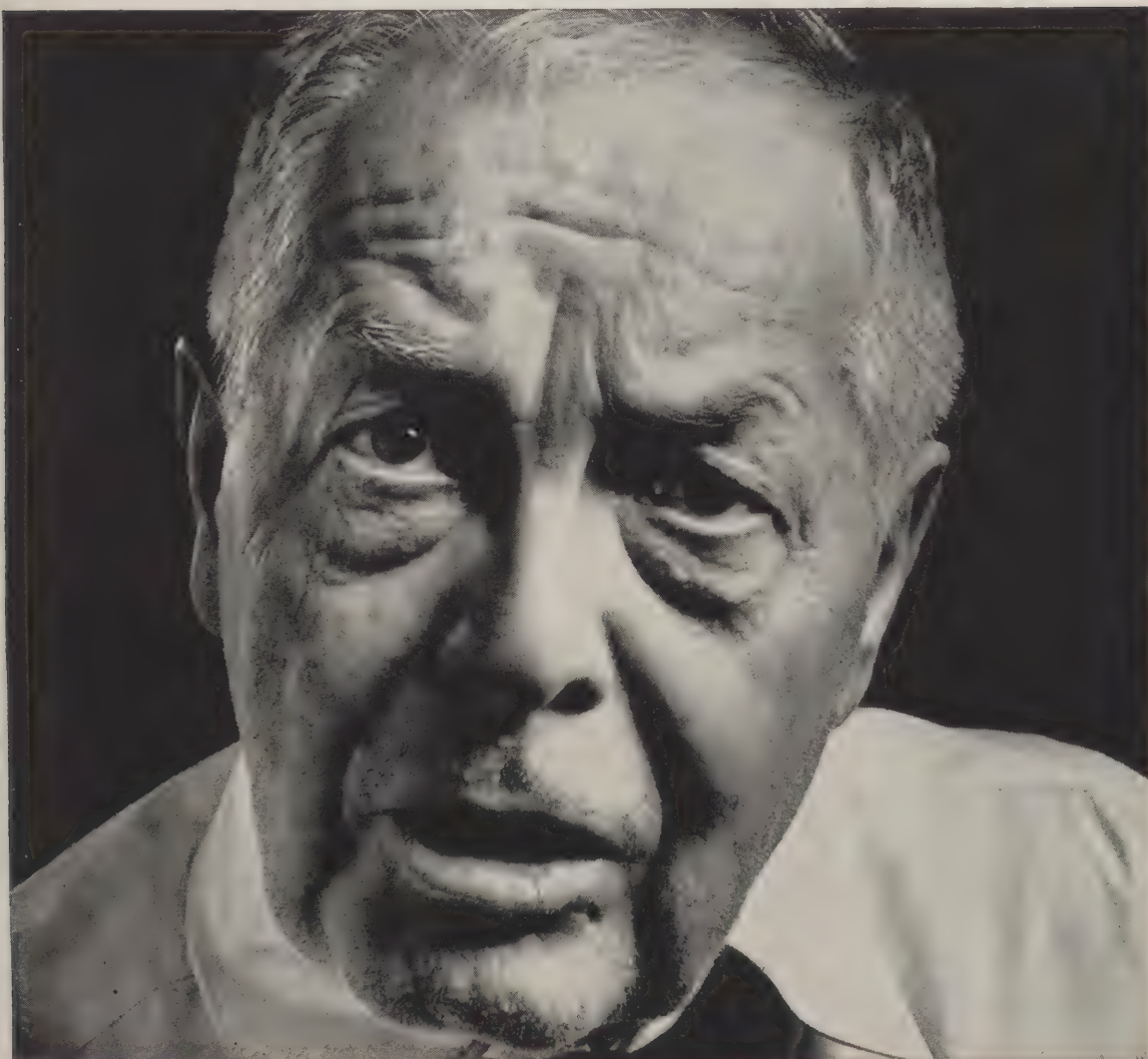
Side Effects typical of tetracyclines which may occur: glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis, dermatitis, overgrowth of nonsusceptible organisms. Also: photodynamic reaction (making avoidance of direct sunlight advisable) and, very rarely, anaphylactoid reaction. Reduce dosage in impaired renal function. The possibility of tooth discoloration during development should be considered in administering any tetracycline in the last trimester of pregnancy, in the neonatal period, and in early childhood. **Capsules**, 150 mg. and 75 mg. of demethylchlortetracycline HCl. **Average Adult Daily Dosage**: 150 mg. q.i.d. or 300 mg. b.i.d. 1. Kunin, C. M.; Dornbush, A. C., and Finland, M.: Distribution and Excretion of Four Tetracycline Analogues in Normal Young Men. *J. Clin. Invest.* 38:1950 (Nov.) 1959.

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"They keep saying I'm sloppy!"



***Nicozol® helps you restore
your geriatric patients' interest in themselves***

NICOZOL therapy can help you brighten the outlook of your aging patients who tend towards (1) untidiness, (2) irritability, (3) incompatibility, (4) lack of interest, and (5) loss of memory or alertness.

The NICOZOL formula helps improve mental acuity, increase the supply and use of oxygen in the brain, improve peripheral circulation—without excitation, depression, or other untoward effects.

NICOZOL can help you keep your aging patients actively alert and at ease with themselves, their families, and others.

Supplied: NICOZOL tablets (and capsules) in bottles of 100 and 1000. NICOZOL elixir in pints and gallons.

Precautions: May produce overstimulation in high doses. Discontinue if muscular twitchings or clonic convulsions occur. The flush produced in sensitive individuals is transient and harmless.

Average Dose: 1 to 2 tablets (or capsules) 3 times a day. 1 teaspoonful elixir 3 times a day.

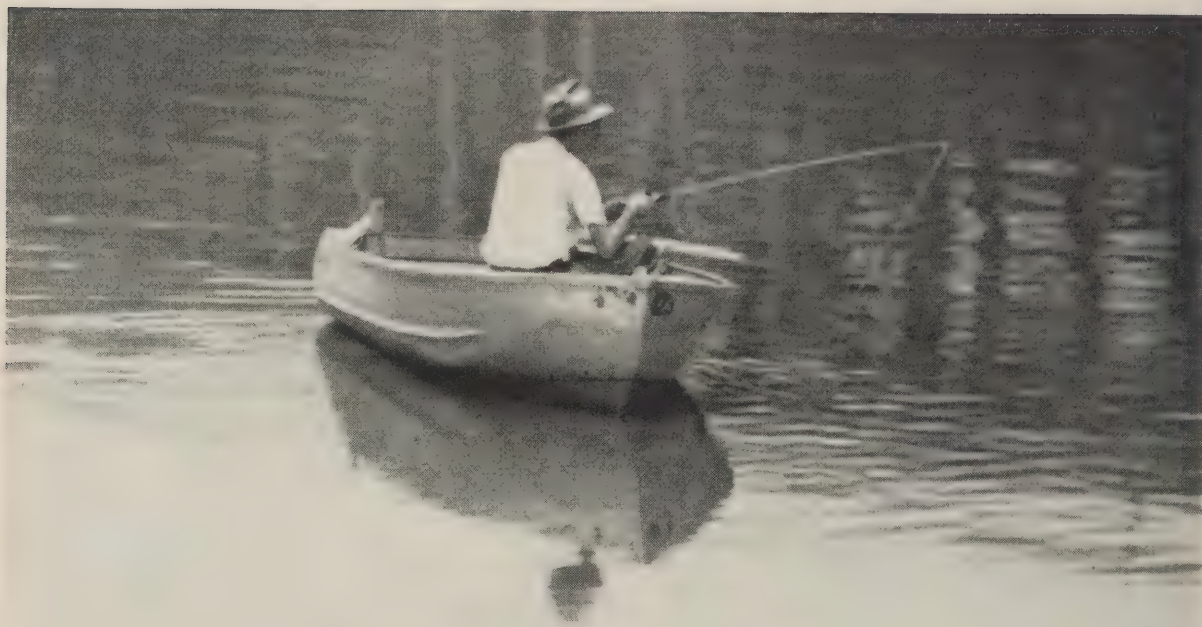
Formula: Each tablet or capsule contains:

Pentylenetetrazol.....	100 mg.
Nicotinic Acid.....	50 mg.
Each teaspoonful (5 cc.) elixir contains:	
Pentylenetetrazol.....	200 mg.
Nicotinic Acid.....	100 mg.
(as the sodium salt)	
Alcohol.....	5%

HART

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LABORATORIES
Bryn Mawr, Pa., Winston-Salem, N. C.

NICOZOL®



*The discharged
mental patient . . .
and Thorazine®
brand of chlorpromazine*

"The average practitioner is quite capable of handling the vast majority of ex-institutionalized patients by regulation of medication, reassurance, manipulation of the environment where necessary, and . . . other technics." Kline, N.S.: Postgrad. Med. 27:620 (May) 1960.

The family physician must often assume responsibility for the discharged mental patient. Thorazine (chlorpromazine, SK&F) can be a valuable adjunct to the continuing care of this patient, because it helps prevent relapses by insulating him from the impact of stressful experiences. For successful rehabilitation and prevention of rehospitalization, however, the former mental patient—and often his family—also needs the guidance and counsel of his physician.

Many physicians are surprised by the high doses of Thorazine (chlorpromazine, SK&F) used in patients released to their care from mental hospitals. This surprise may be expressed by a drastic reduction in dosage "to play it safe"—with serious consequences for the patient.

The successful maintenance of former mental patients requires adequate, often "high" dosage, and often for prolonged periods of time. Fortunately, these dosages do not mean greater risks for the

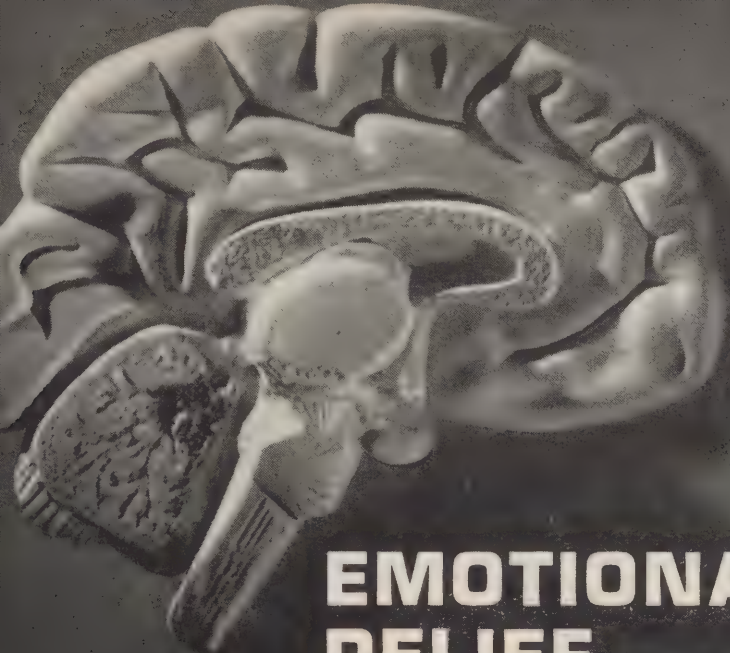
patient. On the contrary, there is much less risk of serious side effects once a patient has become gradually accustomed to Thorazine (chlorpromazine, SK&F)—*regardless of dosage*—over a period of a few months. Continuing therapy is almost always well tolerated, and is essential to most patients' continued well-being.

Brief Summary: Thorazine (chlorpromazine, SK&F) has been successfully used for 10 years in the treatment of mental and emotional disturbances, and has proven highly effective in the maintenance therapy of former hospitalized mental patients. **Principal side effects:** The most frequently encountered side effect is transitory drowsiness. Other occasional side effects include: dry mouth, nasal congestion, constipation, miosis, dermatological reactions, photosensitivity, jaundice, hypotension, increased appetite and weight; very rarely, mydriasis, agranulocytosis, extrapyramidal symptoms. **Contraindications:** Comatose states or in the presence of excessive amounts of C.N.S. depressants.

For complete prescribing information, please see PDR or available literature.



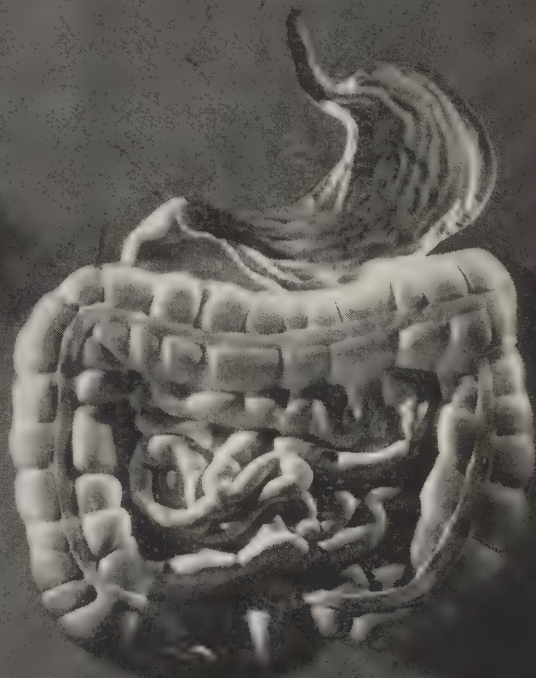
Smith Kline & French Laboratories



EMOTIONAL RELIEF

FOR THE

PHYSICALLY ILL



RELIEVES ANXIETY, APPREHENSION AND TENSION.



All day long

... keeps the patient calm,
and the mind clear.



All night too

... aids restful sleep, with
no barbiturate hangover.

MEPROSPAN®-400

(MEPROBAMATE 400 MG. SUSTAINED RELEASE)

Simplified, convenient dosage for emotional relief.

Side effects: 'Meprospan' (meprobamate, sustained release) is remarkably free of untoward reactions. Daytime drowsiness has not been reported. Rare allergic or idiosyncratic reactions may occur, generally developing after 1-4 doses of the drug.

Contraindications: Previous allergic or idiosyncratic reactions to meprobamate contraindicate subsequent use.

Precautions: Should administration of meprobamate cause drowsiness or visual disturbances, the dose should be reduced. Operation of motor vehicles or machinery or other activity requiring alertness should be avoided if these symptoms are present. Effects of excessive alcohol may possibly be increased by meprobamate. Prescribe cautiously and in small quantities

to patients with suicidal tendencies. Massive overdosage may produce lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse. Consider possibility of dependence, particularly in patients with history of drug or alcohol addiction; withdraw gradually after prolonged use at high dosage.

Complete product information available in the product package, and to physicians upon request.

Usual adult dosage: One 400 mg. capsule or two 200 mg. capsules at breakfast; repeat with evening meal.

Supplied: 'Meprospan'-400 (meprobamate 400 mg.), 'Meprospan'-200 (meprobamate 200 mg.), each in sustained-release capsules. Both potencies in bottles of 30.

WALLACE LABORATORIES  Cranbury, N. J.

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New...for your patients:

diet-rite. cola

*only 1 calorie per 6-oz. serving
no sugar at all*

cut Rx writing by 2/3
in colds, flu or grippe

NAME _____

ADDRESS _____



No need to write three separate prescriptions for antitussive, decongestant and analgesic relief of common cold, flu or grippe symptoms when it is therapeutically correct... economically sound... to specify

ANTITUSSIVE/DECONGESTANT/ANALGESIC 'EMPRAZIL-C' TABLETS

Each tablet contains:

Codeine Phosphate*	15 mg.
'Sudafed'® brand Pseudoephedrine Hydrochloride...	20 mg.
'Perazil'® brand Chlorcyclizine Hydrochloride.....	15 mg.
Phenacetin.....	150 mg.
Aspirin.....	200 mg.
Caffeine.....	30 mg.

*Warning—may be habit forming

'Emprazil-C' Tablets are available on prescription only.

Dosage: Adults and children over 12 years—1 or 2 tablets—3 times daily as required. Children 6 to 12 years—1 tablet—3 times daily as required. **Caution:** While pseudoephedrine is virtually without pressor effect in normotensive patients, it should be used with caution in hypertension. Also, while chlorcyclizine has a low incidence of antihistaminic drowsiness, the usual precautions should be observed. **Supplied:** Bottles of 100 tablets.

Also available without codeine as
'EMPRAZIL'® TABLETS

Complete literature available on request from
Professional Services Dept. PML.



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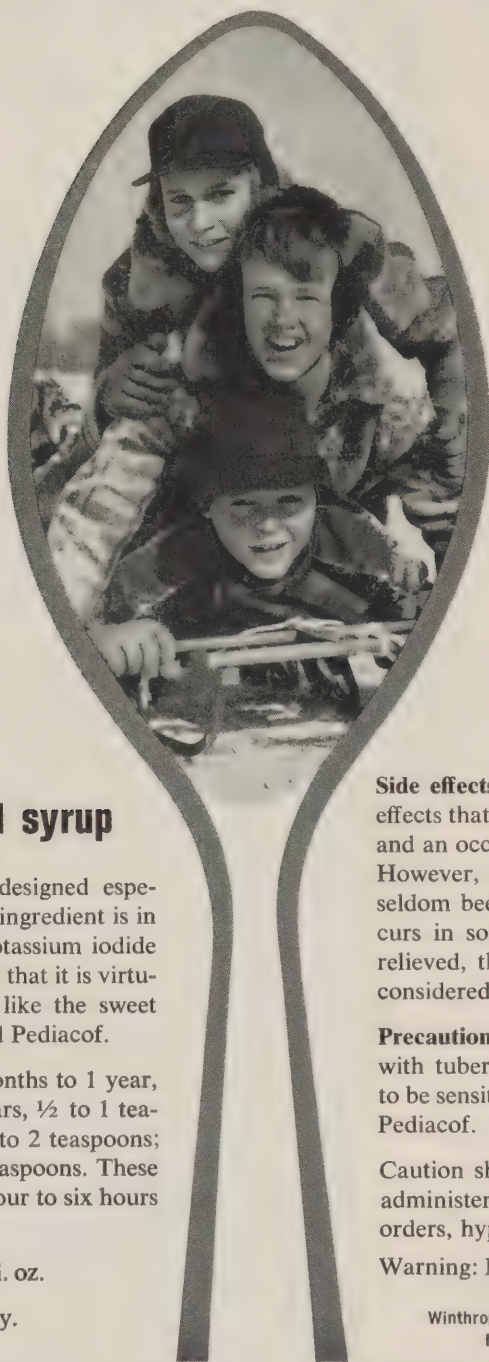
Tuckahoe, N. Y.

Special cough formula for children

Pediacof[®]

Each teaspoon (5 ml.) contains codeine phosphate 5 mg.,
Neo-Synephrine[®] hydrochloride (brand of phenylephrine hydrochloride) 2.5 mg.,
chlorpheniramine maleate 0.75 mg. and potassium iodide 75 mg.

soothing decongestant and expectorant



**bright red,
pleasant-tasting,
raspberry-flavored syrup**

Pediacof is different. It is designed especially for children, and each ingredient is in the right proportion. The potassium iodide in Pediacof is so well masked that it is virtually unnoticeable. Children like the sweet raspberry flavor of bright red Pediacof.

Dosage: Children from 6 months to 1 year, $\frac{1}{4}$ teaspoon; from 1 to 3 years, $\frac{1}{2}$ to 1 teaspoon; from 3 to 6 years, 1 to 2 teaspoons; and from 6 to 12 years, 2 teaspoons. These doses are to be given every four to six hours as needed.

How supplied: Bottles of 16 fl. oz.

Available on prescription only.
Exempt Narcotic.

Side effects: The only significant untoward effects that have occurred are mild anorexia and an occasional tendency to constipation. However, discontinuance of Pediacof has seldom been required. Mild drowsiness occurs in some patients but, when cough is relieved, the quieting effect of Pediacof is considered beneficial in many instances.

Precautions and contraindications: Patients with tuberculosis or those who are known to be sensitive to iodides should not be given Pediacof.

Caution should be exercised if Pediacof is administered to patients with cardiac disorders, hypertension or hyperthyroidism.

Warning: May be habit forming.

Winthrop Laboratories
New York, N.Y.

Winthrop



**some may
need the
combined
formula**

ACHROCIDIN[®]

TETRACYCLINE HCl-ANTIHISTAMINE-ANALGESIC COMPOUND

Each Tablet contains:

ACHROMYCIN[®] Tetracycline HCl . . 125 mg.
Acetophenetidin (Phenacetin) 120 mg.

Caffeine 30 mg.
Salicylamide 150 mg.
Chlorothen Citrate 25 mg.

Effective in controlling tetracycline-sensitive bacterial infection and providing symptomatic relief in allergic diseases of the upper respiratory tract. Possible side effects are drowsiness, slight gastric distress, overgrowth of nonsusceptible organisms, tooth discoloration. The last named may occur only if the drug is given during tooth formation (late pregnancy, the neonatal period, early childhood). Average Adult Dosage: 2 Tablets four times daily.

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The Journal of The
SOUTH CAROLINA
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Malaria in South Carolina

South Carolina's Maternal Mortality for 1961

Congenital Heart Disease in Infants and Neonates

Nursing Education Today

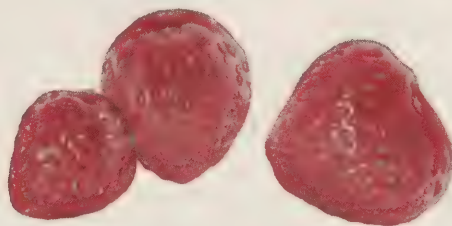
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VOLUME 60

MARCH 1964

NUMBER 3

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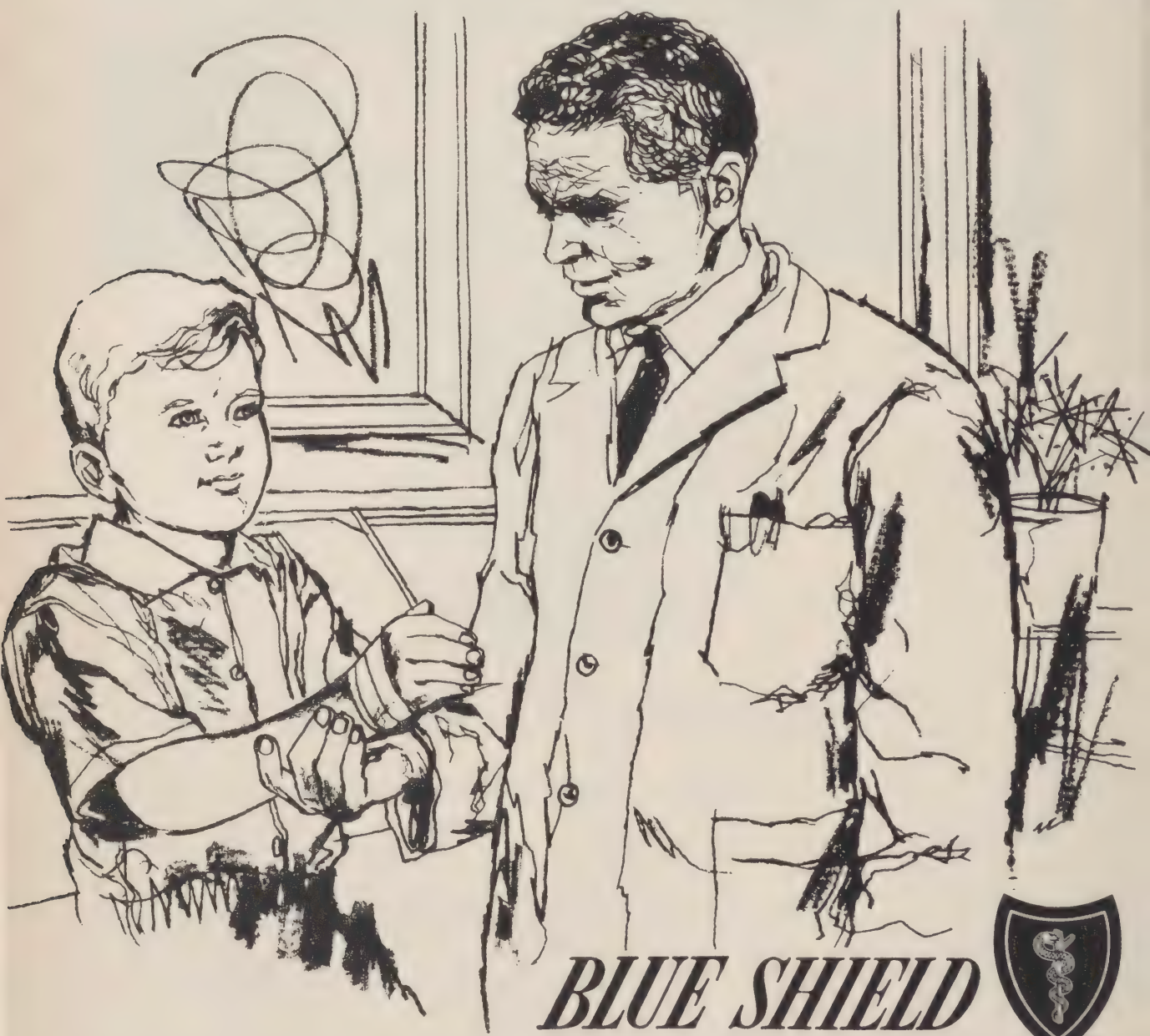
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The Journal of The SOUTH CAROLINA Medical Association

MARCH, 1964 — VOL. 60, NO. 3

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Contributions of Original Articles

Length—Short articles of about 2,500 words (about 8 typewritten pages, double spaced) are preferred. Longer articles ordinarily will defer to the shorter ones in schedule of publication.

Manuscripts—Manuscripts should be typewritten, double spaced, and the original and a carbon copy submitted.

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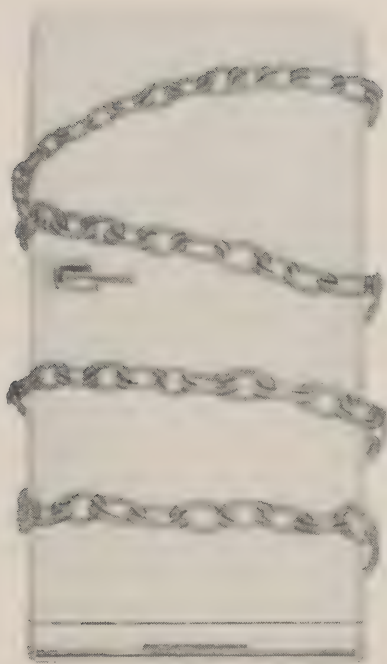
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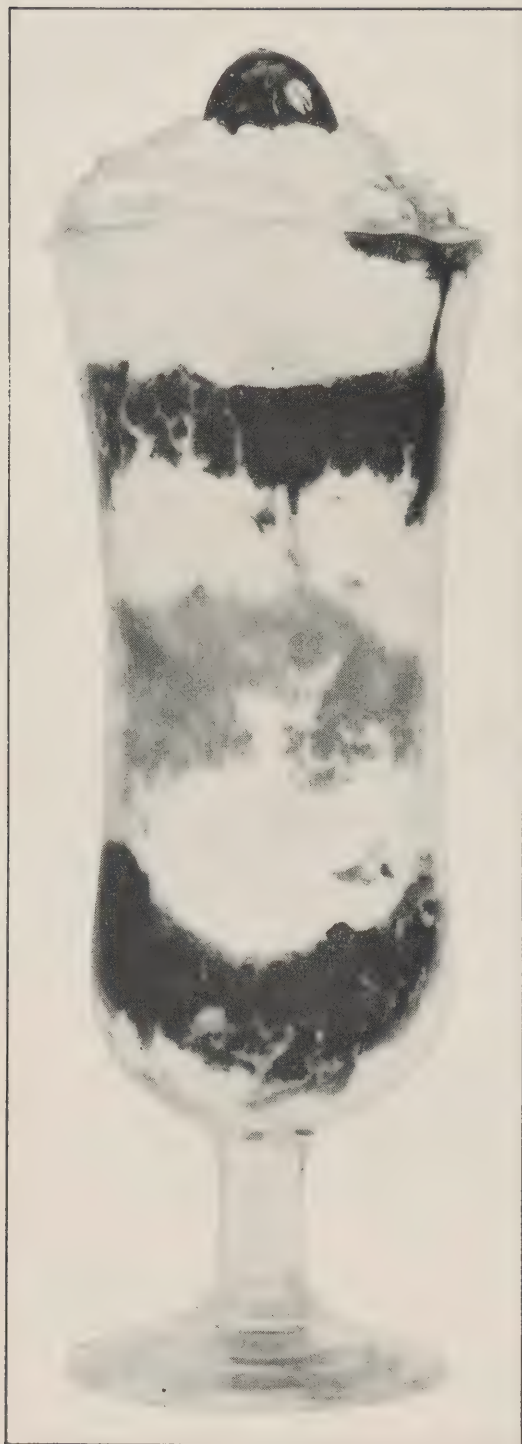
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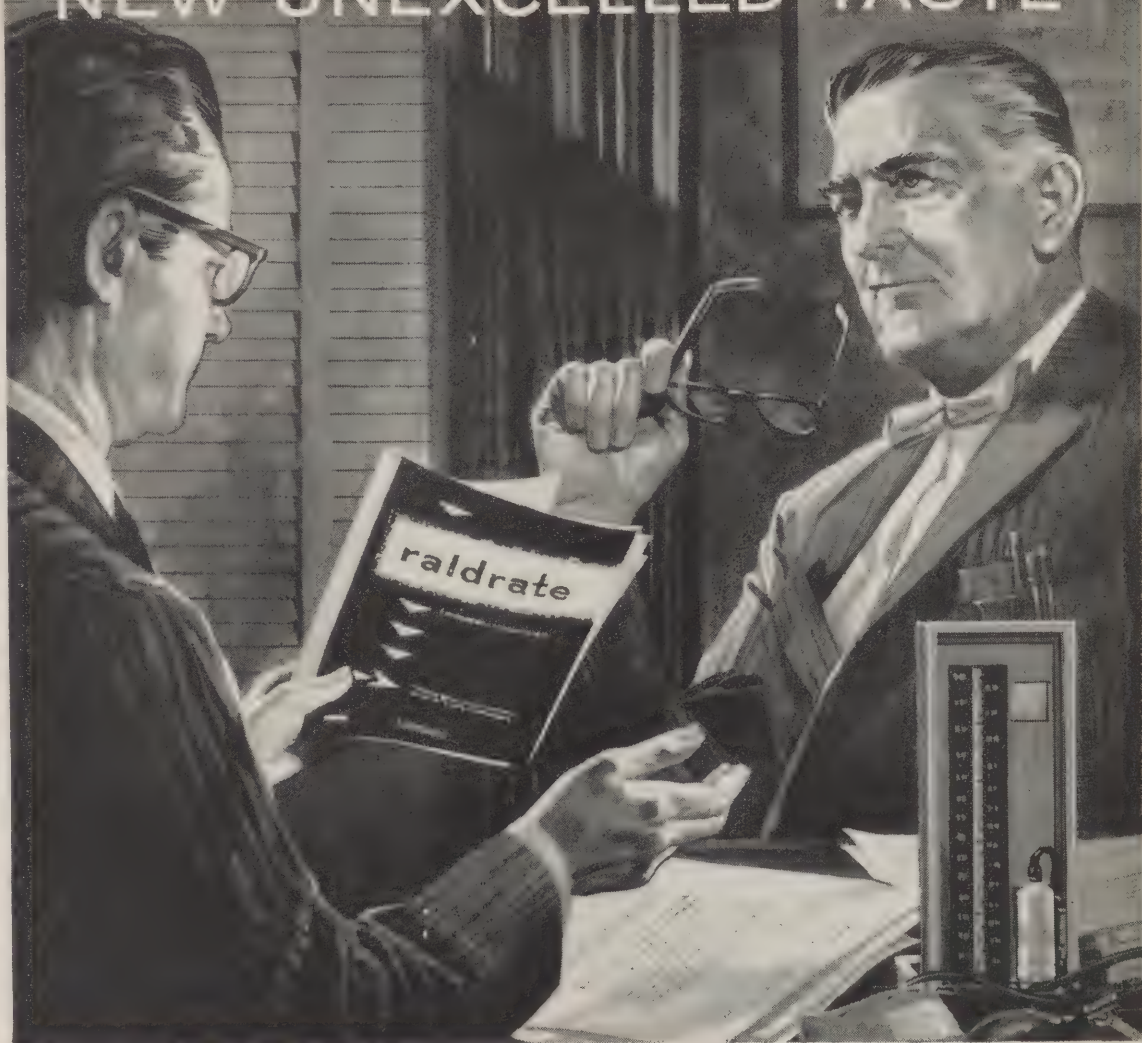
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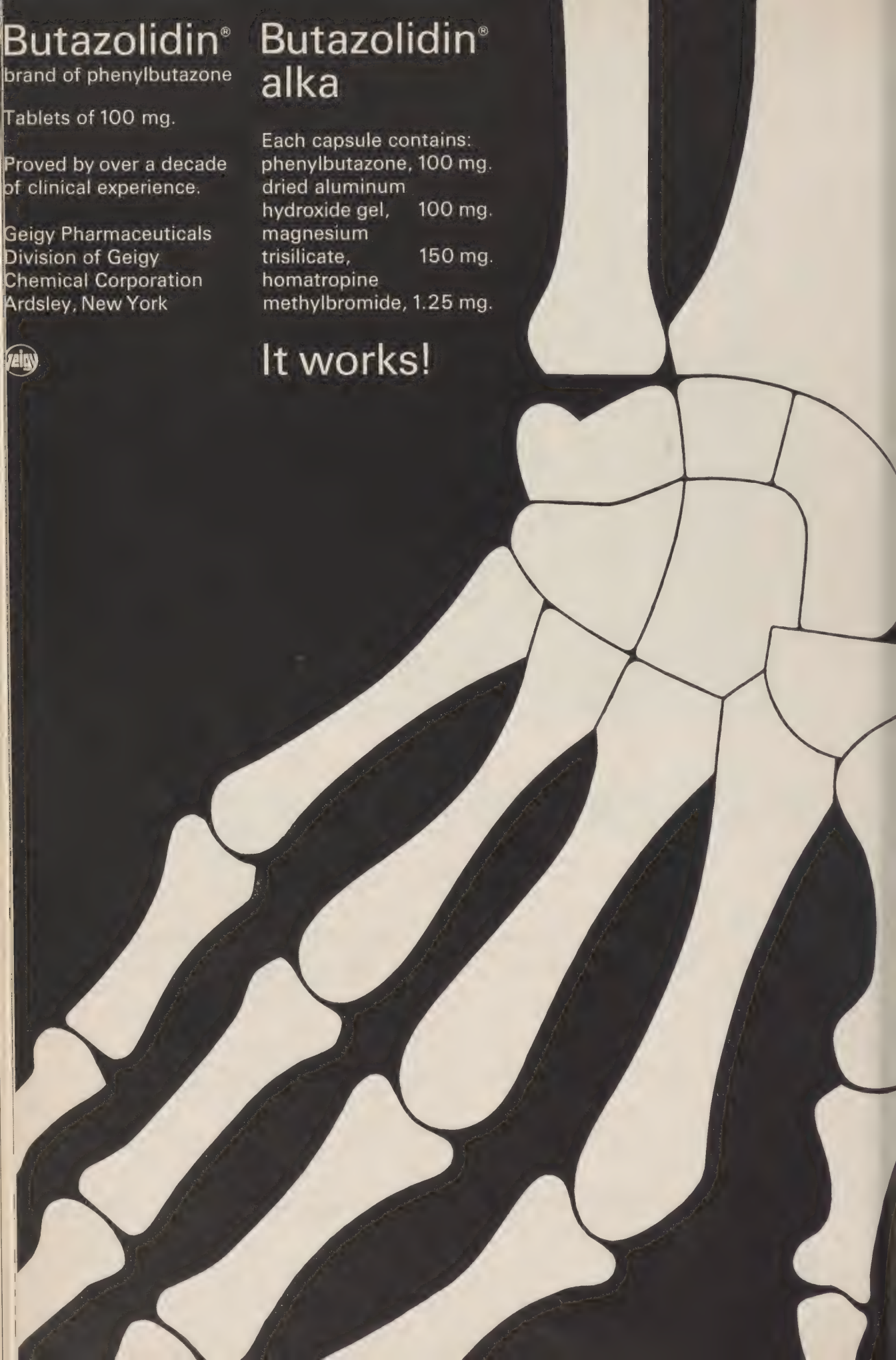
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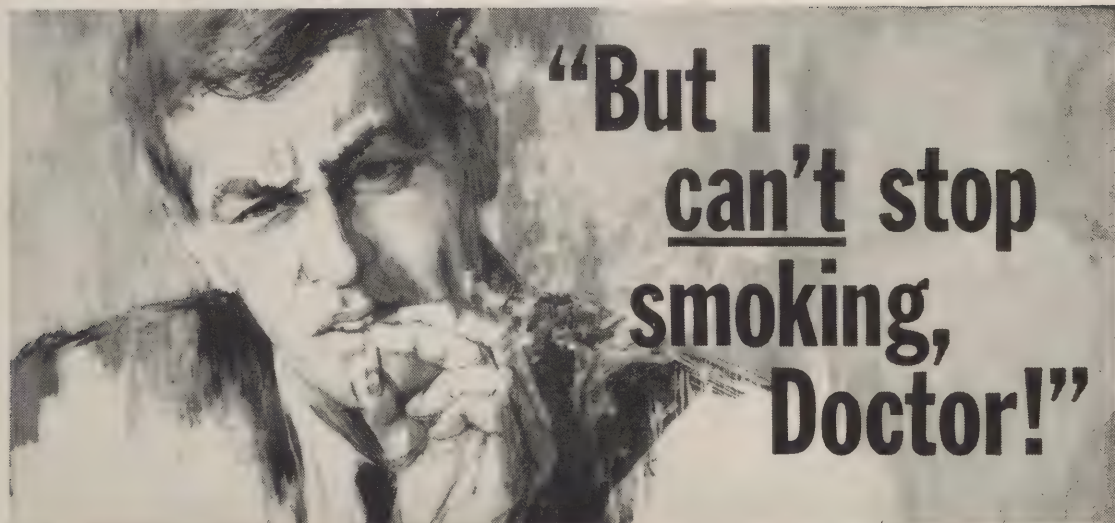
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may require
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at night.

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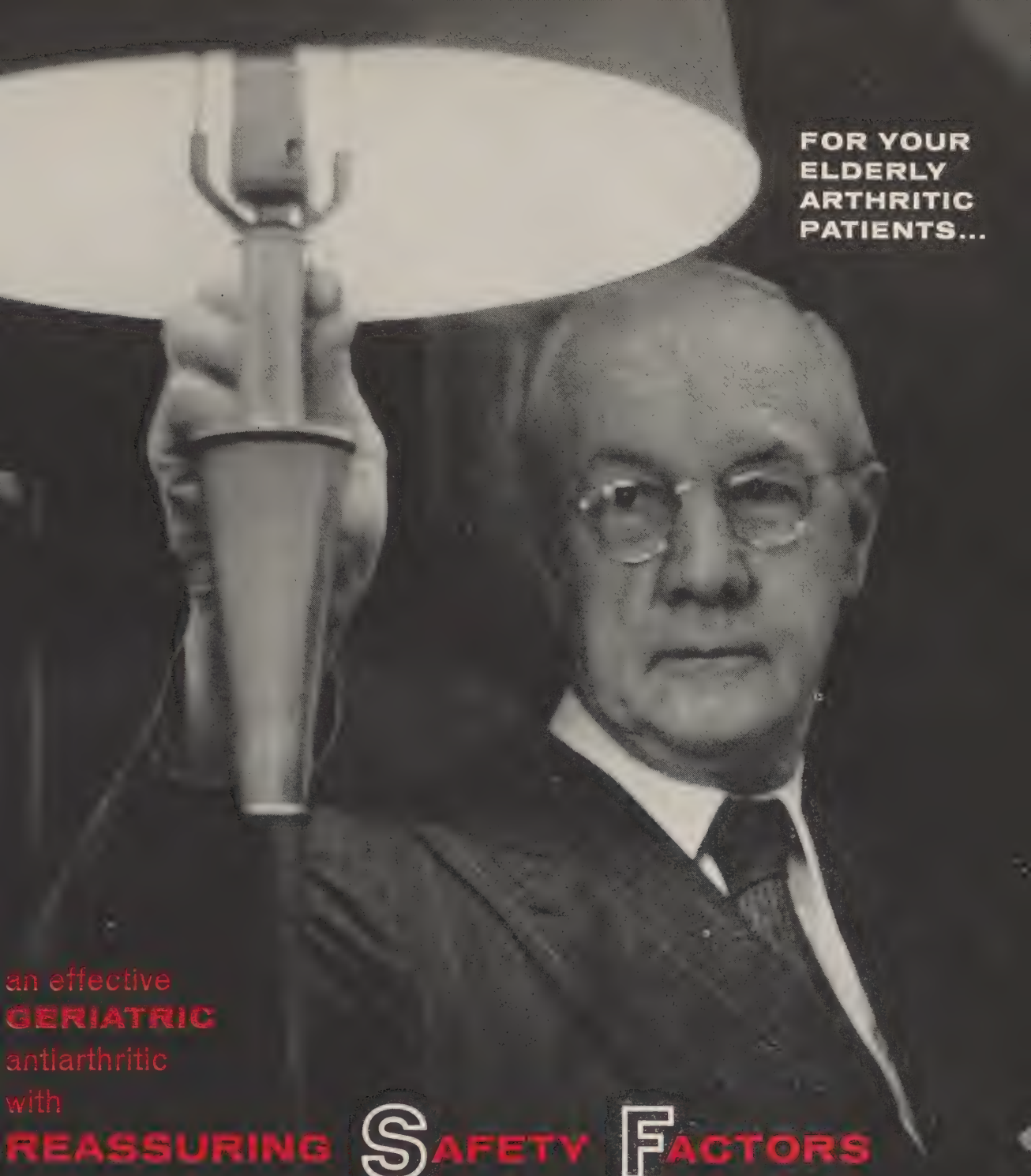
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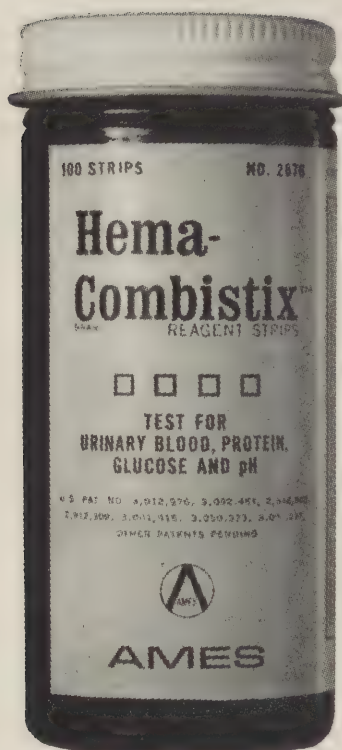
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The Journal

of the

South Carolina Medical Association

VOLUME 60

March, 1964

NUMBER 3

MALARIA IN SOUTH CAROLINA

G. E. McDANIEL, M. D.

Division of Disease Control

State Board of Health

Columbia, S. C.

At one time malaria was responsible for many deaths in the state and caused thousands of cases with consequent untold economic losses in terms of treatment and time lost from work. It has been brought under control and is no longer a public health problem.

Many of our towns in the low country were settled on what was known as high ground to get away from the malaria mosquito hazards of the swamp areas. Some sawmill and lumber production industries in the state's larger river valleys were abandoned because of the high incidence of malaria among the employees. This high incidence made it difficult to keep labor and to make continued operations economical. Hemorrhagic (blackwater) fever was a common occurrence. The decline in the incidence of malaria is shown in Table I and its prevalence in school children is indicated in Table II.

Malaria—Annual Average Number of Cases and Deaths in South Carolina by Five Year Periods 1935-1954 and Total Reported Cases and Deaths 1955-1962—TABLE I.

Period	No. Cases	No. Deaths
1935-'39	15,954	341
1940-'44	9,809	111
1945-'49	4,902	16
1950-'54	198	2
1955	4	1
1956	4	0
1957	2	0
1958	0	0
1959	1	0
1960	0	0
1961	1	0
1962	0	0

Malaria—Results of Blood Film Examinations of Elementary School Children in South Carolina 1937-1943—TABLE II.

Race	No. Examinations	No. Positive
White	47,937	328
Negro	58,658	2,219
Total	106,595	2,547

Cases have declined from a high of 20,409 in 1936 to relatively few cases since 1955. The latest confirmed case of malaria indigenous to South Carolina occurred in 1953 and was reported in the annual report of the State Board of Health of 1954. Deaths have declined from 450 in 1937 to none since 1956. The results of blood film examinations from school children in all counties in the lower half of the state are shown in Table II. These examinations were from a one-day sampling of children in the elementary grades and blood films collected from the children present on that day. The percentage of positive slides indicates that during this period malaria was most prevalent among Negro children and relatively less so among white children. In addition to these studies a household blood film study was conducted in Clarendon County from October 1944 to February 1952. Blood films were collected from more than 80% of the 1,800 inhabitants in the study area once a month. These people had an infection rate of 48% in October 1944 that declined to zero for the last two years of the study.

This disease has been brought under control as a result of many methods that have been used over a long period of time. All these methods were directed toward breaking the chain of transmission between the mosquito and man. They have included the best known methods at the time. Mosquito nets and house screens were among the early methods of protection but were not completely effective because they protected only during sleeping hours or hours indoors.

Drainage of mosquito breeding areas was the most widely used method of control for many years. It was the most effective method of community control until the advent of the residual and space sprays following World War II. The State Board of Health supervised much of the drainage for malaria control. It was the established policy of the State Board of Health to recommend for drainage only those areas in which malaria was a public health community problem and in which malaria-carrying mosquito breeding was demon-

strated. Larvicides were used extensively in conjunction with drainage and independently for areas such as ponds, streams, and water-carrying ditches where this type of control was the most economical and effective.

Sprays of many types have been used over the years. The pyrethrum household sprays applied with household sprayers for killing the adult mosquito were used for many years with some success. The introduction of residual spray into eleven counties in 1945, its extension to 23 lower state counties in 1946 and to state-wide use in 1947 and since, and the use of aerial sprays in the form of fogs, mists, and dusts in the early 1950's have been important factors in bringing and keeping malaria under final public health control. In only one instance in South Carolina was there evidence of a small community spread of malaria from returning World War II veterans. There were instances in which returning veterans experienced relapses of their malaria while at home on furlough but no transmission to other members of the family or the community occurred. It is believed that residual spraying of all homes in the so-called malarious areas of the state for several years following World War II prevented the transmission of this disease from infected returning veterans.

Economic status of the population has not received sufficient credit for its part in the reduction of malaria. With the improved economy, people were able to purchase more adequate treatment and to improve their houses to exclude malaria mosquitoes better. Drug treatment and prophylaxis have also improved over the years. The early quinine treatment was not completely effective, particularly against the sexual forms of malaria parasites and required a longer course of treatment than people were willing to undergo. Atabrine offered a shorter term of treatment and was somewhat better as a prophylactic but again was not completely effective since relapses would occur. The newer drugs such as primaquine and more recent ones provide the patient a much shorter and more

efficient treatment and produce more effective cures. They have the advantage also of being effective against the sexual forms of parasites and hence offer a more adequate prophylaxis.

In South Carolina many methods designed

for the prevention of malaria have been used and all have played their important part in its eventual control as a public health problem. Always the methods used were those that at the time were the best known and which the individual or the community had the will and the money to purchase.

Tongue tie. A. F. Wallace. Lancet 2:377 (Aug. 24) 1963.

Tongue tie is described and the scanty literature reviewed. The cases fall into four groups: (1) Infants referred when less than two years old, because the parents believe that the tongue tie should be "snipped" lest it subsequently interfere with speech. 2 need no treatment. Snipping is dangerous. Patients of age because they are slow to speak properly, and anxious parents blame the tongue tie. (3) Children and young adults more than four years who in addition to a tongue tie, also usually have a serious cause for defective speech, eg a congenital supra-bulbar paresis, a badly repaired cleft palate, an underdeveloped mandible, mental retardation, and stammering. (4) Children whose tongue tie has recurred after "snipping." Children in groups 1 and 2 need no treatment. Snipping is dangerous. Patients in groups 3 and 4 require lingual frenectomy, performed under endotracheal anesthesia.

Surgical palliation of calcific pancreatitis. H. B. Othersen, Jr., M. D., (Charleston) Amer Surg 29:521-524, Aug. 1963.

Calcific pancreatitis is a severe disease and difficult to palliate as attested by the numerous operations devised for its alleviation. A brief review has been made of the etiology of calcific pancreatitis and of some of the operations devised for its treatment. Two cases are presented and the surgical management is discussed. Essentially, the proposed operation accomplishes good drainage of the pancreas by duodenotomy and division of the sphincter of Oddi and, in addition, a distal pancreatico-jejunostomy. Furthermore, all of the calcific pancreatic ductal deposits are removed with a curette and with irrigation of the pancreatic duct.

With such a procedure pancreatic tissue is preserved, obstruction is alleviated, and drainage established. Results have been encouraging.

Fibrillatory wave size as a clue to etiological diagnosis. M. R. Culler, J. A. Boone and P. C. Gazes. (Charleston) Amer Heart J 66:435-436, Sept. 1963.

Fibrillatory wave size may be related in most instances to etiological diagnosis.

We have reviewed all electrocardiograms with atrial fibrillation made at the Medical College Hospital from January 1956 to June 1962, without previous knowledge of the clinical diagnosis. The tracings were classified according to the amplitude of the f wave in Lead V₁, measured from the trough to the peak. The f waves were considered as *fine* when the amplitude measured 0.5 mm or less, and *coarse* when the amplitude exceeded 0.5 mm. The tracings were further classified as *straight-line fibrillation* when the f waves were indistinguishable from the base line, and *very coarse* when the amplitude exceeded 2.5 mm. Hospital charts were reviewed for clinical diagnosis and for the duration of atrial fibrillation with or without congestive heart failure. A total of 340 cases of atrial fibrillation were studied.

Coarse f waves occurred primarily in rheumatic heart disease, thyrotoxicosis, and functional atrial fibrillation. Fine f waves appeared primarily in arteriosclerotic and hypertensive heart disease. Straight-line fibrillation was seen only in the latter two categories, whereas very coarse f waves occurred only in rheumatic heart disease and thyrotoxicosis.

X-ray, autopsy, and operative findings revealed a close relationship between coarse f waves and left atrial enlargement in patients with rheumatic heart disease. The fact that patients with thyrotoxicosis and with functional atrial fibrillation had coarse f waves without left atrial enlargement suggests that there may be factors other than left atrial size. Right atrial size and the ratio of hypertrophy and dilatation of the atria are probably other important factors.

SOUTH CAROLINA'S MATERNAL MORTALITY
FOR 1961

E. J. DENNIS, M. D.
Chairman, Maternal Mortality Committee

AND

JOSHUA TAYLOE, M. D.
Charleston, S. C.

The maternal deaths in South Carolina for 1961 have been subjected to statistical analysis. In the year 1961 there were 40 maternal deaths. During that year there were 59,930 live births in the state of South Carolina. Of the total 34,771 were white and 25,159 non-white. By comparison in 1960 there were 42 reported maternal deaths and 59,702 live births. In 1959 there were 39 maternal deaths and 60,179 live births. Table I shows race distribution and legitimacy of the pregnancy:

Table with 3 columns: RACE, LEGIT., ILLEGIT. Rows for Negro and White.

The overall rate or incidence per 1,000 live births was 0.68 as compared to 0.73 in 1960 and 0.63 in 1959. This gives an incidence of one maternal death in every 1,471 live births. Of the total white live births there was a maternal mortality rate of 0.17 or one maternal death in every 5,882 live births. Of the total non-white live births, the mortality rate was 1.35 or one maternal death in every 741 live births.

Table II shows the age and parity distribution:

Table with 3 columns: AGE, NEGRO, WHITE. Rows for Average, Primi., Secund., Multi., Unknown, and Total.

Table III shows the primary causes of maternal death:

Table with 2 columns: Cause, Percentage. Rows for Hemorrhage, Toxemia, Septicemia, Renal failure, Pulmonary embolus, Unclassified, and Total.

*Three cases following abortion

Of the five cases of septicemia, three followed abortion. One death from bacterial endocarditis, occurred 21 days after delivery. One patient died nine days after cesarean section from generalized peritonitis secondary to a spontaneous perforation of the cecum. Of the four patients with renal failure, one died from a "delayed transfusion reaction nine days following cesarean section," another died from pyelonephritis, and severe hypertensive vascular disease with superimposed pre-eclampsia. Another died following abruptio placentae and a fourth from "nephritis." Of the three embolic deaths, one was from a pulmonary embolus secondary to pelvic thrombophlebitis two weeks postpartum. Another was two weeks postpartum from a pulmonary embolus, and the third death was from a pulmonary embolus three days post-cesarean section. The primary cause of one maternal death was unknown.

Table IV shows the time relation to labor:

Table with 2 columns: Cause, Percentage. Rows for Postpartum deaths, Abortion, Antepartum, Intrapartum, Unknown, and Total.

The one intrapartum death occurred in a 35 year old multigravida at term with a his-

MATERNAL MORTALITY

tory of hypertension. The patient complained of being hot, then developed a convulsion and respiratory arrest. She had cardiac action thereafter for some eight minutes. An emergency cesarean section was performed with delivery of an 8 lb. infant who survived for 45 minutes.

Table V shows the adequacy of prenatal care:

Adequate	5 (12.5%)
Inadequate	13 (32.5%)
None	6 (15%)
Unknown	16 (40%)
Total	40

Prenatal care was judged to be adequate if at least six prenatal visits were made.

Table VI shows the outcome of the pregnancies:

*Delivered	27
Non-delivered	3
Ectopic	4
Abortion	4
Unknown	2
Total	40
*11 Stillborns	

Table VII shows the number of consultations and autopsies:

	CONSULTATIONS	AUTOPSY
Obtained	11 (27.5%)	10 (25%)
Not obtained	19 (47.5%)	30 (75%)
Unknown	10 (25%)	

Table VIII gives a breakdown of the causes of hemorrhage as a primary cause of death.

Ectopic	5
Ruptured uterus	4
Cerebral hemorrhage	3
Postpartum atony	3
Retained placenta	2
Total	17

There were two cases of abruptio placentae. One patient was delivered of a premature stillborn and she died three weeks postpartum from bacterial endocarditis. The other case of abruptio placentae occurred in a 40 year old multipara with death questionably due to acute renal failure.

Table IX shows the incidence of toxemia. Toxemia was present in 22 cases, the primary cause of death in 10.

Eclampsia	11
Pre-eclampsia	1
HVD	10
Total	22

There has not been a decrease in the number of maternal deaths in South Carolina over the past few years. Many concede that the high maternal death rate is related to poor patient education among the Negro population, which is in part true, but still there is a significant number of deaths yearly that can be eliminated by a better understanding and relationship between the patient, family, and physician, and a more cooperative atmosphere between the physicians of South Carolina and the Maternal Mortality Committee.

Psychological difficulties in the maintenance of sterile technic. William H. Prioleau (Charleston). Ann Surg 158:319, August 1963.

Inherent limitations of sterile technic, in failing to effect absolute asepsis, give rise to psychological problems in maintenance. Factors other than sterility enter into wound healing. The foregoing serve as basis for rationalization in case of error or lax technic. Other sources of difficulty are disregard of regulations by established surgeons, time lapse between error and recognition of infection, varying standards ac-

cording to specialties and procedures, and dependence upon antibiotics for prophylaxis. The immediate purpose of sterile technic is to protect the patient at hand, while the overall purpose is to prevent cross contamination from infecting subsequent cases. The surgeon should demonstrate an active interest and recognize his responsibility. The nursing staff should be observant for faults, and assume the duty of making corrections; tact and judgment should be used to avoid resentment. Methods will improve but psychological factors will continue to be a problem.

CONGENITAL HEART DISEASE IN INFANTS AND NEONATES

An Analysis of Mortality in Unoperated Cases*

WILLIAM H. LEE, JR., M. D.,**

DAVID TRESAN,***

JAMES W. PATE, M. D.****

Within the past five years, elective surgical repair of congenital heart lesions has become routine in children and adults. However, the overall mortality in infants and neonates having congenital heart disease is still unreasonably high. MacMahon¹ reporting a mortality series for congenital heart disease, indicated that 34 per cent of the patients died within four weeks of birth, and 61 per cent died within the first year of life. Richards² reporting on congenital heart disease in a series of 6,053 infants recorded 15 per cent mortality within four weeks, and 12 per cent additional mortality within the first year of life. Gardner and Keith³ indicated that tetralogy of Fallot and transposition are the most frequent causes of death in infancy from congenital heart disease.

In the past there has been a common attitude that severe congenital heart disease in the infant is inoperable, and therefore, no vigorous attempt has usually been made to establish a definitive diagnosis or to attempt operative salvage. This attitude has been slowly giving way to a more aggressive trend of performing surgical repair of congenital heart lesions in the newborn. The recent pertinent study, by Collins *et al*⁴ regarding 120 operated cases of congenital heart disease in

infants reported that 24 per cent were ventricular septal defect, 22 per cent tetralogy of Fallot, and 17 per cent coarctation and patent ductus arteriosus. All of these infants underwent operation as an emergency, and all were in heart failure. Their overall salvage rate of 69 per cent strongly supports the rationale of operative intervention in this group of patients. This salvage has since been confirmed and slightly improved (72%) in extending the total series of operated cases to 400 infants less than one year of age.

The present study was undertaken to define the magnitude of the problem comprised by nonrecognition and pessimistic management of congenital heart disease in the newborn, or infants. There are few reported series in the literature which illuminate this problem, because of failure to isolate this age group (0-2 years) as a separate entity, or because the reporting institution contained a highly selected referred patient group. A misleading perspective may be created when the reporting institution does not contain a representative cross section of the population. The patients included in this report were drawn from the records of the City of Memphis Hospitals, a large general city-county charity hospital system serving a population of approximately 0.5 million, and these cases are thought to be a representative cross section of the statistics of this population group.

Materials. The records of all infants who died with congenital heart disease between 1955 and 1960 in the City of Memphis Hospitals were reviewed. The data was then

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**Assistant Professor of Surgery, Medical College of South Carolina (Formerly University of Tennessee)

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CONGENITAL HEART DISEASE

TABLE I
City of Memphis Hospitals (1955-1960)

NEONATE				INFANT			TOTAL SERIES		
		% total	% CHD	#	% total	% CHD		% total	% CHD
All Cases Autopsied	1038	--	--	797	--	--	1835	--	--
Congenital Heart Disease	81	8	--	101	13	--	182	10	100
Class I Defects	27	2.6	33	30	3.8	30	57	3.1	31
Class II Defects	13	1.3	16	33	4.1	33	46	2.5	25
Class III Defects	11	1.1	14	18	2.3	18	29	1.6	16
Class IV Defects	30	2.9	37	20	2.5	20	50	2.8	27

broken down into two age groups: (1) New-born to two weeks of age (neonates); (2) Two weeks to two years of age (infants). The total number of autopsies for this period in these age groups was 1,835. Of these 182, or ten per cent, were recorded as death due to congenital heart disease, based upon autopsy findings. An additional 25 cases of children who died with a clinically established diagnosis of congenital heart disease brings the total number of deaths due to congenital heart disease to 207. Since the exact anatomical diagnosis was not proven by autopsy, these 25 cases are not included in the following statistical analysis.

Specific types of congenital heart disease were categorized into four classes: Class I represents single anatomical defects which are considered to be readily correctible by routine operative procedures. Class II includes more than one defect, each of which is considered to be readily operable at the present time. Class III includes anatomical defects which may be successfully treated by palliative operations. Class IV comprises categorically inoperable defects according to the current generally accepted indications. Table I reveals the statistical breakdown of these four classes, as well as the incidence of congenital heart disease in this autopsy series for each of the two age groups. A further breakdown of the specific diagnoses within each one of the four classes is given in Table II. It is rather surprising to note that approximately 1/3 of both the newborn and infant groups are comprised of readily remediable isolated

defects. (Class I) In addition, 1/4 of the total group of patients falls in the Class II category of readily remediable multiple defects. Thus, over 50 per cent of these patients who died before reaching the age of two years with proven autopsy diagnoses of congenital heart disease, may be considered as suitable candidates for operative correction of their congenital heart defects. Furthermore, an additional 16 per cent of the total number of cases of congenital heart defects represents patients who would have some chance of salvage if subjected to a palliative procedure. Only about 1/4 of the total group of 182 autopsied cases would be considered as categorically inoperable at the present time.

TABLE II
Classes of Congenital Heart Disease—Diagnoses
(0-2 years)

	Number of Patients	% of CHD Series
Class I (operable)		
PDA	29	16
VSD	19	10
ASD	2	1
Aortic Stenosis	2	1
Pulmonary Stenosis	1	1
Class II (operable combinations)		
VSD, ASD, PDA	17	9
Coart. aorta, PDA, VSD	5	3
VSD, ASD, PS	9	5
Miscellaneous Combin.	15	8
Class III (Quasi-operable)		
Truncus	10	5
Transposition	13	7
Multiple Defects	6	3
Class IV (Inoperable)		
Isolated Anom.	7	4
Multiple Anom.	43	24

A comparison of these data with the total of all autopsied cases in the age range of 0-2 years for this time period emphasizes the astounding finding that about 7 per cent of all of the infants who died represent congenital heart problems which can be salvaged by current operative techniques. Only 3 per cent of the entire autopsy series were categorically inoperable. The alarming numbers of preventible deaths in these tiny patients may be further depicted by comparison of the above mortality statistics with a brief summary of two operative series in the same age range of patients. The report of Cooley *et al*⁵ of 400 cases in a similar age range demonstrated that approximately 70 per cent of such cases may be salvaged. Forty-six of their patients had ventricular septal defects which were successfully corrected, with survival in 67 per cent. In 59 of their cases, palliative shunts were done, and the patient salvaged in 51 of these (86 per cent). Ninety per cent of the group having patent ductus arteriosus (78 infants less than one year of age) were salvaged. Sixty per cent of the patients in the series were less than three months of age.

Our own experience with surgical correction of congenital heart lesions in this age range of patients is depicted in Table III. These cases are taken from the same five year interval (1955-1960). Although the series is

TABLE III
Surgical Emergencies — Infant C.H.D.
(1956-1961)

	Number of Cases	Survival
PDA	29	93%
Coarctation Aorta	4	75%
Tricuspid Atresia	4	75%
Tetralogy of Fallot (Blalock Shunt)	2	100%
Miscellaneous "Open Heart" Surgery—VSD, PS, ASD, AV Canal, and Transposition	15	47%
TOTAL	54	78%

small (total of 54 cases), the overall salvage of 78 per cent (47 per cent salvage in those cases requiring pump oxygenator perfusion) seems an adequate justification for adopting the more aggressive philosophy. All of the operative procedures in this group were undertaken as emergencies, for infants considered to be in severe cardio-respiratory distress due to their congenital heart lesion.

Thus, it would seem that the newborn and infant cardiac, rather than representing a group of patients too small and too sick to undergo operation, paradoxically is frequently too sick to postpone operation. A more vigorous attempt to establish definitive diagnosis and instigate a surgical attempt at correction is therefore vigorously proposed to all who carry the responsibility for the care of sick children.

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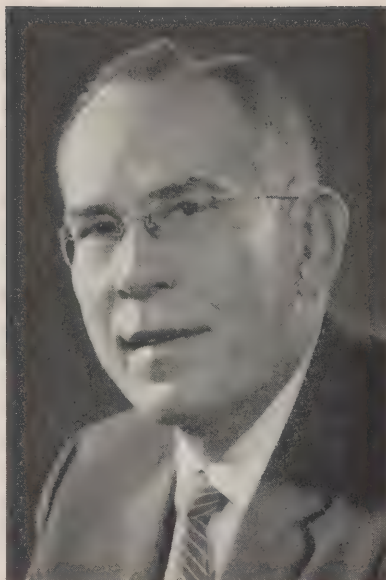
A O A MEETING

The annual A. O. A. Initiation and Banquet will be held on Friday, April 10, 1964. The speaker will be Dr. Howard C. Taylor, College of Physicians and Surgeons, Columbia University.

His subject will be "The Medical Students Selection of a Career" or "Medical Education in Russia," at 5:00 P. M., in the Hospital Amphitheater. The Initiation and Banquet will be at the Holiday Inn, 125 Calhoun Street, Charleston, S. C., at 7:00 P. M.

President's Page

Each year at the Annual Meeting the House of Delegates acts on resolutions introduced by individuals or by county societies, and the reports of many committees often contain directives which must be made effective. These may have to do with various internal organizational details such as the set-up of new committees or study groups; in addition there may be resolutions advocating legislation in the interest of the public health, and the taking of positions regarding state-wide or national problems, or the opposition to various proposals.



In the long run, the responsibility for the implementation of actions of the House of Delegates must rest with the Officers of the Association and with the Council. Too often, the House has adopted high sounding resolutions, but, perhaps aside from the dispatch of a few telegrams or letters to key persons, the matter has rested without further action. The House of Delegates is the policy making group of the Association but it is up to the officers to put these policies to effective action. Often this has not been done; in one notable exception, in the matter of the repeal of the Naturopathic Practice Act by the Legislature, the combined efforts of the Officers, Council, Committees, and many members of the Association were able to bring this to a happy conclusion.

No set procedure has been followed in the past, but it would seem pertinent to outline some of the things that might be done each time a policy matter has been approved by the House. Whenever legislation of a specific sort is advocated, a tentative draft of such a proposal should be made, certainly with the advice of our own counsel and perhaps with the assistance of others versed in the art of legislative writing. It should be approved by the standing committee on Legislation; an effort should be made to assure its introduction into the Legislature by some sympathetic member. After it has been referred to a committee of the Legislature, a prepared formal statement of the Association's stand should be sent to the committee and a request for an open hearing should be made. Chosen representatives of the Association should appear before such a committee and outline their reasons for advocating its approval. In addition the Woman's Auxiliary might well be enlisted to urge our support on a personal basis with individual legislators.

When we oppose legislation on a state wide basis, similar efforts should be made and the all out support of all members of the Association should be enlisted. The power of the individual physician speaking to the legislator of his personal acquaintance should never be underestimated.

In the sphere of national legislation we cannot do nearly as much on a personal basis. However, one should remember that Congressmen and Senators do pay considerable attention to the letters they receive from their constituents, and an effort should be made, not only by the members of the Association, but by anyone they can get to help, to use this method of approach. In addition, one should not forget the power of the ballot, and the effectiveness of our political action committee—SCALPEL—should never be neglected.

Only if we go about our business in an orderly fashion, only if we follow a definitely set procedure, only if we do these things in a manner that is understandable to the Legislature can we ever hope to accomplish our aims.

Robert Wilson, M. D.

Editorials

Medical Education

The author of this brief paper is well aware that anyone having the temerity to discuss this segment of education, where there are so many divergent opinions, particularly by professional pedagogists, lays himself open to being told that "Fools rush in, where angels fear to tread." Nevertheless there are some facets of medical education that might be mentioned by an amateur.

Very properly before reading this the question arises, what qualifications has the author to discuss this important subject? The answer is that in addition to having done some reading on this topic, he some years ago attended a medical school. Subsequently for a fairly long time he was on its faculty. There at different sessions, as instructor, lecturer and finally full professor, he taught or tried to teach, didactically and clinically various branches ranging from histology and laboratory physiology to ward medicine and later pediatrics.

Further the writer has had the good fortune to attend clinics and listen to lectures in several medical colleges in the U.S.A. and abroad. So it might be said that he knows something about the subject through experience as a donor as well as a recipient.

During these years it has often occurred to the writer that even though medical education has made marked advances, and various changes have been instituted, yet one must ask, are the medical schools doing as good a job as they should? Are they preparing their students, who mostly are to practice medicine and surgery, well enough? Also, but not conversely, does the course require as much time as it takes? Are there not methods by which it can be shortened, without impairment?

Without argument it is admitted that even after the medical school has done all that it can, it becomes necessary for the new doctor to spend a number of years in hospital work.

For it is impossible for the medical school that must cover so much territory, to equip anyone with sufficient intensive training for specialization. The best that can be done is to open up to him or her the many avenues of fundamental medical knowledge.

Further one wonders if it would not be possible, perhaps in the senior year—probably not sooner—to offer courses preparatory to a career as a teacher of medicine, as a public health officer, a family doctor, a specialist or perchance a researcher.

But long before this the faculty, especially those who map out the curriculum, must decide how much of basic science should be had before admission. If the entrant has had sufficient of this and is well prepared, then the number of hours, perhaps years at a medical college could be shortened or it might be possible to provide more clinical work. As it is now, too long a time is required before one can become an M. D.

Of course we have come a long way in medical education, especially since the "proprietary colleges" and since the elimination of many unfit ones, following the publication of the Flexner Report in 1910. That opened the eyes of educators to the urgent need for improvement.

But we should not be too harsh in our criticism of medical schools before that era, for it is only in the recent past that the importance of a knowledge of biology, physics and chemistry has been recognized. Indeed not many years have elapsed since much was known of virology and of genetics. It seems but yesterday that genetics appeared on the horizon, even though many years have passed since the original work by Gregor Mendel. The doctor need not be an expert in that field, but he should have some acquaintance with it, and recognize its importance, especially in pediatrics.

So omitting all minor points in the work of

the medical school of today, the question that must be answered is:—Are they doing a satisfactory job?

It would be interesting and perhaps of some value, if annually some medical schools sent a questionnaire to their recent graduates, asking a few pertinent questions as to what the new doctors considered the good and the bad features in their courses, and in the method of instruction. The replies need not have to be signed. Then in 5 or 10 years or sooner the same doctors could again be queried, for their evaluations may have changed. This may or may not be of any value. However as teaching and learning are totally different, and since the doctor is the end product of the medical school, he well can be expected to have some opinions.

It is recognized by many of us that the time spent on becoming a doctor is too long, for when he begins his practice the neophyte is no longer young. Perhaps it is possible to shorten the number of years at the medical college or preferably at the liberal arts college, and still accomplish what is necessary, so that the graduate is well educated. Some colleges and universities today are trying by different methods to bring this about. Only time will tell what success they have.

R. M. Pollitzer, M. D., F.A.A.P.

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The New Talisman — Efficiency

Thomas Jefferson said that our founding fathers had provided a government under which the people could be happy, if they could restrain it from meddling in their affairs, always under the pretext of doing something for the public welfare.

Under the pretext of public welfare, federal expansion and usurpation have been so phenomenal that another vehicle for such activities would seem superfluous—but a new

model has been produced nevertheless — efficiency. By its use, government need no longer argue that the people cannot do a certain thing for themselves, and that therefore the government must do it for them; government can now merely claim that it can do the job better. No one is opposed to efficiency as such, in government or elsewhere; but the ultimate goal of a free people should not be efficiency, but the jealous preservation of their freedom.

The thirteen states that united to form the federal government had developed naturally over the years, and through normal development our territory has increased to a total of 50 states, each devoted to local control of its own area in most fields. There have always been persons who considered this arrangement inefficient. Some years ago certain planners devised a scheme dividing the continental United States into some 14 administrative districts, in which any relation to state boundaries was purely coincidental. This plan, though not abandoned, has not been implemented as yet. A more recent group planned to divide and administer our territory on the basis of river basins, like the TVA, again completely ignoring state lines and powers, and eventually establishing complete and total control from Washington.

One facet of all schemes for total control of the population is through government control of medical practice. King-Anderson type legislation prepares for control of patients and physicians; central hospital planning provides for control of the facilities for patient care, again controlling both patients and physicians.

No one wants hospitals to spring up with the profusion of filling stations; but are we prepared to grant government the authority to decide finally what facilities shall be built, and when, and where; so that no one else can build any, even at his own risk?

Lest anyone question the reality of the intention of government to control not only hospitals but ancillary medical facilities such as nursing homes, etc., the following is quoted from the pamphlet "Areawide Planning for

Hospitals and Related Health Facilities," published by the Public Health Service of the Department of Health, Education and Welfare and dated May, 1961.

"After more than a year of study and deliberation, the committee concluded that the urgency of the nation's hospital and related health facility problems calls for immediate steps to intensify current planning efforts. A local planning agency should be established wherever a substantial planning problem exists. The governing board of each agency should be broadly representative to include community leaders as well as persons knowledgeable in medical care.

"Each region having a substantial hospital or related health facility planning problem should have a local planning agency, formed either by voluntary community initiative or by official action by the state or local governments." (More plainly, if the local citizens won't set up such an agency, somebody will set it up for them.)

"Areawide hospital and related health facility planning will aid communities in—

Maintaining and improving quality of care as economically as possible.

Correcting deficiencies in existing facilities and services.

Stimulating the construction of needed facilities, including those for educational purposes.

Discouraging construction not conforming to community needs.

Improving patient care by developing

more effective interrelationship among facilities.

Developing an orderly distribution of all facilities in keeping with the projected population characteristics and overall community development."

When one considers that this nation has the highest standard of medical care ever known anywhere, there might be some disagreement with the contention "that the urgency of the nation's hospital and related health facility problems calls for immediate steps to intensify current planning efforts." Anyone who has completed the sixth grade and thereby demonstrated his competence to interpret government diction and vote intelligently, will realize at once that this plan will place construction of new hospital and ancillary facilities, maintenance of old facilities, and operation of the same completely within the control of the local planning authority, which in turn will be under the control of the national planning authority in order that the different areawide plans will tie in properly together. As President Johnson put it in his economic message to Congress, "The many existing federal, state, local and private programs must be brought together, and communities must be helped to develop their own action plans." If that is what we doctors want, we can confidently expect that if we will just let President Johnson and the Congress alone, and quietly go about our business of practicing medicine, we will have it, shortly and permanently.

Thomas Parker, M. D.

NOTICE

A HISTORY OF MEDICINE IN SOUTH CAROLINA

1670-1825

by Joseph I. Waring

will be distributed soon without charge to those members who have requested it before March 20.

After March 20 the book will be for sale for \$7.50 a copy.

Write to Joseph I. Waring, M. D., 82 Rutledge Avenue, Charleston, South Carolina 29401.

ANNUAL MEETING OF THE ASSOCIATION

Case Reports For Discussion

Differential Diagnosis and Management of The Unconscious Patient

2:45 P. M., THURSDAY, MAY 7th

This 46 year old female was admitted initially on November 2, 1962 because of right sided weakness of 5 days duration. The history was obtained as incomplete and of doubtful veracity. It was stated by friends that there were frequent domestic squabbles at home and it was thought that she might have sustained trauma to the head approximately 3 to 4 weeks prior to admission. There was no evidence of dysphasia, convulsions, or visual difficulties. The patient denied ethanol intake, however, this was refuted by friends. Her dietary habits were thought to be poor.

Examination: Numerous petechiae and erythematous excoriations were noted on the back and abdomen. The liver was not palpable, however the spleen was 10 cm below the left costal margin and nontender. Although lethargic, she was oriented and responded to questions. There was no dysphasia. A right hemiparesis with associated reflex changes was noted.

Significant laboratory studies: Decreased white blood count (3000 mm^3) and platelet count ($45,000 \text{ mm}^3$), total bilirubin 1.4 mg/100 ml, amylase 100, alkaline phosphatase 14.6, prothrombin time 20.2 (control 13.2 seconds), LDH 70, SGOT 60, bleeding time 5 minutes, clotting time $9\frac{1}{2}$ minutes. Skull films were normal; no pineal gland was noted. Electroencephalogram showed bilateral slow wave activity. Carotid arteriography revealed bilateral subdural hematomas.

Course: Burr hole evacuation of the subdural fluid resulted in an improvement in her clinical state. She was discharged subsequently to be followed in the clinic. Diagnosis: Bilateral subdural hematomas, secondary hypersplenism. She was treated with multivitamins, a high protein diet and Synkavite.

The patient presumably continued to consume alcohol and her diet remained inadequate. Approximately one day before her 2nd admission she was found comatose by a neighbor. On examination in the Emergency Room the patient responded to painful stimuli and exhibited no focal neurological signs. The splenomegaly was again apparent. The morning following admission the patient recovered consciousness and a "liver flap" was noted.

Laboratory findings at this time were again significant for the presence of a leukopenia, thrombocytopenia, and evidence of chronic liver disease (serum albumin 2 G, globulin 4 G, BSP 25.9, alk. phosphatase 7.4, prothrombin time 17.2 sec. (control 12.8 seconds). The electroencephalogram again revealed gross slow dysrhythmia. During the remainder of her second hospital visit the patient's

mental status improved. She was treated with a low protein diet. Diagnosis at discharge, May 1, 1963, was Laennec's cirrhosis, splenomegaly and hepatic coma.

This patient was a 74 year old white female who was admitted on September 13, 1963 via the Emergency Room with the chief complaint of severe occipital headache of one hour duration.

A Billroth I procedure for carcinoma simplex of the stomach had been performed on the patient in this hospital in 1960. She did not have significant complications or sequelae from that operation and she was asymptomatic until one hour prior to admission when she noted the sudden onset of severe excruciating occipital headache. This was accompanied by slurring of speech and dizziness.

No previous history of hypertension, headaches, diabetes, strokes or other diseases indicating neurological dysfunction could be elicited.

Physical Examination: In the Emergency Room the patient was found to be a thin, acutely ill and pale white female, complaining of severe occipital headache. BP: 240/130; pulse 78 and regular; respiration 20 and temp. 36.6°C . General physical examination was unremarkable. No bruits were heard over the neck or skull. Neck stiffness was noted. There were no intra-abdominal masses or organomegaly.

Neurological Examination: The patient was confused and responded poorly to commands and to painful stimuli. The gag reflex was depressed but the remainder of the cranial nerves were apparently normal. Flaccidity of all extremities was noted without any definite focal weakness. Reflexes were equal and active bilaterally without pathologic responses. Coordination was not tested. The patient responded to pin-prick throughout.

Laboratory Data: Hct., 35, BUN 18; normal electrolytes. Prothrombin time 15.3 seconds. Skull x-ray films were normal. Chest films: Pulmonary edema with superimposed pneumonia on the left.

Hospital course: While in the Emergency Room the patient became deeply comatose, unresponsive to painful stimuli and developed marked flaccidity of all extremities. The reflexes disappeared as did the neck stiffness. An LP was performed and the CSF was grossly bloody with 498 mg of protein and a xanthochronic supernatant. The patient continued in the same clinical state until 25 minutes after admission when she expired (September 14).

NURSING EDUCATION TODAY

Role of The National League for Nursing

J. DECHERD GUESS, M. D.

Greenville, S. C.

The National League for Nursing (NLN) is little understood by doctors. It has acquired a reputation among us based in part upon an erroneous conception of its relationship to the American Nurses' Association (ANA). The two organizations are quite distinct. However, there are relationships more significant than the simple fact that both are national organizations of nurses. The League serves as the committee on education for the Association. There is an inevitable interlocking of the executive committees and of the governing boards of the two organizations, because of the fact that the aggressive and vocal leaders of each organization are more or less the same individuals. However, objectives of the two organizations differ.

The League, as an organization, has taken no stand on socialization of medicine or of nursing or on collective bargaining. Nor does it have in its membership a recognized and vocal element of members of any labor organization as does ANA.

The primary objective of NLN is the improvement of the status of professional nurses and the improvement of nursing care.

The National League for Nursing was organized in 1952. It is a lineal descendent of the old National League of Nursing Education which dated from 1892. The NLN resulted from the merging of the National League of Nursing Education, the Association of Collegiate Schools of Nursing, the National Organization of Public Health Nurses, the Joint Committee on Careers in Nursing, the National Committee for Improvement of Nursing Service, the National Nursing Accrediting Service, and the Joint Committee on Practical Nurses and Auxiliary Workers in Nursing Services.

The articles of incorporation of NLN state:
"The object of the organization shall be to foster the development and improvement of hospital, industrial, public health, and other organized nursing services and of nursing education through the coordinated action of nurses, allied professional groups, citizens, agencies, and schools to the end that the needs of the people will be met."

The League sums up the results of its organization in these words:⁴

"Thus through NLN, nursing, the nation's most extensive health service, the one most often nearest to the patient, joins hands with consumers and with other producers of health care.

This is the third of a series of articles dealing with modern nursing and nursing education. The fourth article will be published in an early issue.

—The Editor

"... This new day in health care creates partnership between nurses and other people, between nursing and other professions. It offers equal partnership between nurses and all other Americans concerned with good nursing care."

No one could feel anything but approval of those objectives of the League for Nursing. The possible exception would be those doctors, who, unwilling to relinquish a long exercised right of paternalistic determination of all matters pertaining to medical care, would continue to exclude the consumer of medical care from any voice in its distribution and method of financing.

Perhaps, however, more doctors would resent the following statement by NLN:

"... Besides understanding and using a constantly changing array of new medications and equipment, the nurse must see that the ministrations of many different specialists, technicians, and auxiliaries get together at the patient's bedside."

In a strictly literal sense that statement is true. However, one can sense an attitude of presumption in it, an attitude which is more fully expressed in various statements of the philosophy and objectives of nursing education, an attitude which doctors have recognized in many nurses, who have been indoctrinated with the newer philosophy of the role of the nurse in the care of the patient. Today's medical service is increasingly complex, and while the doctor frequently delegates to the nurse the execution of many procedures once performed by himself, he continues to be chief of the health team, and he and he alone can determine which of the "complex medical services" are indicated, and which of them he may delegate to others. It is he who must supervise and direct the others of the team in the care of the patient. It is not the duty of the nurse, nor is she by training prepared to supersede the doctor in the selection or the direction of treatment indicated. The only exception is in emergency situations, and then no longer than the time required to secure a physician.

Regardless of how well she has been taught to observe and evaluate the significance of symptoms, the nurse is neither a diagnostician nor a therapist. For her to attempt to perform either function, carries her beyond the role of the nurse into that of medical practice, with hazards of serious therapeutic error, legal liability, and professional animosity.

Many leaders in nursing education, in their effort to elevate the status of nursing as a distinct profession, are trying to make a delineation between medicine and nursing. This cannot be done. To attempt to do

so antagonizes the doctor, which appears to be of no concern to those who would make the distinction. It tends to give to the nurse a sense of false values and of responsibilities which she should not have and for which she is not adequately trained.

The modern nurse resents any reference to her as the hand-maiden of the doctor, seeing in the term an implication of a relationship of master and servant. The doctor has never looked upon the nurse as his servant. Rather, both he and she are the servants of that jealous mistress, medicine, of whom William Osler used to speak so often. Some would have the relationship be simply the doctor and the nurse, without any implication of either affection or respect one for the other.

Administrative Organization of the League

The National League for Nursing is controlled and directed largely by an executive committee. This committee, not by rule but in fact, interlocks with the executive committee of the American Nurses' Association, with which it meets from time to time. The members of the two committees are selected from the most dedicated, the most able, and the most vocal members of each organization.

On the local level, there are state, district, and in some instances, county leagues. Individual membership in NLN is derived from membership in a local league. Membership in local leagues is open to professional and practical nurses, nurses' aides, laymen, hospital administrative personnel, and other professions allied to nursing. Agencies and organizations interested in nursing and nursing education come into NLN as agency members. Agency members and local leagues send representatives to biannual meetings of NLN.

Anna Filmore, NLN's General Director wrote in 1958:

"[The purpose on which NLN was founded was] that all who share in the improvement of nursing care and education have a right and a responsibility to participate in the work of the organization as full fledged members." However, she complained that after five years, the League was not bringing into state and local leagues as individual members a very large proportion of nurses close to the function of nursing. It was her belief that administrators, supervisors, teachers, and consultants have important roles in improving patient care and that they should be League members. She admitted that, perhaps, the explanation of the lack of interest in League membership of "working nurses" was that they felt that the most effective way of organizing for improvement of nursing has not been found. To the author that statement seems to be significant.

The NLN seeks to pool all talents of a community to foster the development and improvement of nursing education and services in hospitals, public health agencies, industry, and schools. It attempts to do this through consultations, conferences, institutes, workshops, research, surveys, studies, publications, and films. Its division of school accreditation seeks "to

help schools of nursing evaluate their performance and to stimulate their self-improvement."

The League is departmentalized into a Division of Nursing Services, which includes departments of hospital nursing and public health nursing; a Division of Nursing Education, which includes departments of diploma, associate degree, and higher degree programs.³

The League has development relationships with several other organizations to help implement its objectives. The League and the ANA complement each other. It seeks the interest of AHA and AMA in specific projects of nurse educational development. The AMA has a committee on nursing and this committee has requested that each constituent State Association form a committee on nursing.

Sources of NLN's Power

The primary source of power of the National League for Nursing lies in the aggressive dedication of its leaders to the objectives of the League. It implements its power through its influence on state agencies charged by law with the administration of nursing practice acts. These agencies regulate schools of nursing, examine applicants for license to practice nursing, and grant or deny licenses. State Boards of Nursing enforce, as their own, minimum basic programs of instruction prepared by the League, employ licensure examination questions prepared by the Pool Testing Service of the League, and accept the machine grading of the examinations. They endorse licenses issued by other states for privilege of practice only if the applicant has taken and passed with satisfactory grades the Test Pool Examinations.

In addition to the influences exerted through State Boards of Nursing, the League furnishes schools with various tests for evaluation of the suitability of their students for admission to the school and the progress they make during their course of study.

It offers consultation services, self-evaluation programs, and recruitment aids, and it encourages schools to seek accreditation by the League.

In South Carolina, only three schools have been accredited by the League, namely, the South Carolina University Degree School of Nursing, Lander College Associate Degree School of Nursing, and Greenville General Hospital Diploma School of Nursing. The standards for accreditation are very high and they apply not only to the curriculum, but also to the quality of the instructional staff, the salaries paid teachers, and the hours of classroom and laboratory work, including hours of clinical experience learning. Few diploma schools in the state, all of which are accredited by the state, can meet the requirements for League accreditation. Inability to do so involves both financial lack and difficulty in meeting faculty requirements because of the dearth of teachers who meet League standards.

Each State Board of Nursing is an agency of the State rather than of nurses or of any organization of nurses. Its primary purpose is to protect the public, under the law, from nurses with inadequate training

or who are of poor moral character. However, it appears to the writer that in fact the National League for Nurses has taken over those protective powers by reason of its influence on members of State Boards and the willingness of State Boards to assign their duties and responsibilities to the League, an extra-legal, purely advisory body. The attitude of the League is directed nationally, with little consideration of local problems and abilities.

South Carolina has educational problems outside the field of nursing education, and the two are inter-related to considerable degree. Poor high school teaching and training, resulting in students deficient in the three R's, result in inability of many high school graduates to gain admission to college or to schools of nursing with high academic standards. A high ratio of failures result when they are admitted. Some of our colleges have had to adjust to this situation by maintaining lower standards than they wish and by requiring remedial courses of those students who have a chance of removing academic deficiencies.

Believing that a poor teacher is better than no teacher, our public school boards in desperation employ many poor teachers. At times a poorly trained nurse is better than no nurse. Although the licensed practical nurse and nurse technicians are helping to fill the void, hospitals are having great difficulty in maintaining a minimal nursing staff.

Isn't it possible, then, that the standards of nursing education have been advanced too rapidly for the situation which exists? If so, much of the blame lies on the State Board of Nursing and through it on the too ambitious program of the National League.

Problems, Dilemmas, Questions

Although the National League for Nursing has given much time, study, and thought to the task of devising basic programs of nursing education, and although it has used its tremendous influence in implementing its programs, all is not well in the field which it claims as its own. Pertinent questions are being asked. Dilemmas are coming into view. Problems are being discussed by nurse educators and others interested in nursing education.

Thelma Pelley, who holds both a B.A. and a B.Sc.N. degree asks some pertinent questions.⁹ These revolve around a topic question, namely, "In our attempts to divorce nursing education from service, are we ignoring valuable learning experience which emanates from the demands of service?" Then she asks in rapid sequence: ". . . do we not need to clarify our thinking and reach a common understanding and definition of what is meant by sound educational principles?" "Can a five-hour day and a five-day week for nursing students be equated with sound principles of education?" "Can we derive our basic principles from the philosophy and purpose of our own profession rather than from another discipline?" "Does a theoretical knowledge of the laws and principles of psychology and sociology necessarily provide insight and understanding in human relations? Is knowledge equivalent to wisdom?"

She goes on to say that the criterion of professional status is that of a group of persons who share a common body of knowledge, and second that the members of the group recognize and accept an obligation of service to humanity. Then she asks: "If our objective is to prepare students for practice in a profession which is characterized by a service ideal, why is there an almost fanatical concern to completely divorce education from the implications of service demands. Must the giving of a service, that is not related to a specific planned learning experience, be an exploitation of the student detrimental to learning? Might it not be a valuable demonstration of the ethos [or distinguishing characteristic] of the profession, and as such become a sound educational experience?"

The ideas suggested by these penetrating questions, express far more clearly than most of us could, the criticisms of objectives and techniques of modern nursing education made by doctors.

The Surgeon General's Consultant Group on Nursing reported:⁶

"To create order out of the present confusion we need a careful examination of the systems of nursing education. . . A broad study of the patterns of basic nursing education is overdue. . . the present educational structure for the training of nurses lacks system, order, and coherence. There is no clear differentiation as to levels of responsibility for which graduates of each type of program are prepared."

Ruth V. Matheney in a bitter diatribe, which becomes at times almost, if not quite insulting, disagrees with the Surgeon General's Consultant Group.⁴ She quotes advocates of college training for all nurses, dating back to 1912. Then she says: "Over and over. . . again the dual-function apprentice-type educational system under which nursing labors has been pinpointed as the major obstacle to excellence in both nursing service and nursing education."

Margene O. Faddis¹ believes that present education is faulty in that so many things contrive to take the nurse away from the patient. The resolution of how to bring the professional nurse closer to the patient is, she says, a task for the present generation of clinical instructors and nursing service personnel.

NLN makes an interesting statement having a bearing on the confusion existing in nursing educational programs.¹⁰

"In the NLN accrediting program. . . uniformity of schools is not sought. Each school is evaluated against its own objective."

Dorothy D. Meyer⁵ stated in an article published in 1960 that all college schools of nursing did not include subjects in the liberal arts in their curriculum.

In the same journal, Charles H. Russell wrote:¹¹

"At the present time, colleges that offer a professional preparation receive pressure, not only from the community, but from the students themselves and from their parents, to provide an education aimed at preparation for competent occupational

performance. The tradition of apprenticeship and the present pressure on college programs have caused instruction in professional subjects to squeeze out instruction in subjects that seem less practical."

To bring to a close a cataloging of indications of dissatisfaction or lack of approval of the educational programs prepared and endorsed by NLN, as revealed by current literature on nursing education, I will quote from an article by Rita Radzialowski:¹⁰

If three basic programs of nursing education were more or less consistent as to the basic curriculums, the problem of absorbing their graduates into the nursing service field would be taxing, but a solution would be feasible. To date, however, the curriculums offered vary greatly not only from program to program, but also from institution to institution.

... over the last decade, the differences have become so pronounced that inservice placement of graduates is becoming a major problem.

In justice, one can not help but ask, "Is it right to penalize the hospital or the public it serves for the consequences of the wide range of basic curriculums in nursing education programs?" The time seems propitious for a cooperative effort in planning the nursing education curriculum. . . In such a cooperative endeavor, the nursing schools and the nursing education department must furnish the leadership.

Because directors of nursing service are closer to the problem than most educators, they are in position to assess the impact these programs have on patient care, hospital economy, and the work of nurses.

Nursing service directors recognize that vocational and technical nurses are important in patient care. They believe there should be nursing education programs, free from the maze of experimentation, that will give bedside nurses a firm grasp of the basic principles of nursing procedures and practice.

The last paragraph of this long quotation expresses in quite clear and definite language the attitude of doctors generally; that of some directors and many

assistant directors of nursing service; and many of the older nurses who were trained under the strict discipline of the hospital training schools, before they were modernized by State Boards of Nursing, under the direction and sponsorship of the National League.

A director of nursing service in a regional hospital said, "The nurses we have who were trained in modern schools simply do not know the nursing arts, nor even the names of nursing equipment."

An assistant director of nursing in one of our larger and better organized hospitals and who holds a B.A. and a B.Sc.N. degree said, "They expect us to be doctors, diagnosticians and therapists and not nurses."

Two graduates of hospital training schools, before the new era, each said: "night duty as a senior student nurse was when student nurses learned to be nurses. It created confidence, alertness, and a willingness to assume responsibility."

Another said that the relaxation of discipline lessened stress on accuracy, neatness, comprehensiveness in charting, and failure to require kindness and sympathetic care for complaining and hard to please patients, deprived student nurses of some things very essential in good nurses.

Why go on? Talk with patients, with doctors who have been patients, with doctors who have treated seriously ill patients, or with nurses who are directing nursing care in either large or small hospital units. The story is always the same. There is a swelling tide of dissatisfaction and criticism of nurses and nursing care, which, I believe, the powerful NLN and its equally powerful disciples on State Boards of Nursing cannot stop without radical changes in educational programs, objectives, and philosophy. Practical nurses and nurse technicians are already in economic and job procurement competition with registered nurses and there is a growing demand for them to replace student nurses in places of nursing service. Hospitals are feeling the strain of maintaining nursing schools without some compensating student nurse service. Nor can they afford to pay the salaries advocated for "educated" teachers, who do not teach, directors who do not direct, and supervisors who do not supervise.

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WHAT A STATE HOSPITAL ASSOCIATION WOULD LIKE FROM A STATE MEDICAL ASSOCIATION

This is a condensed version of a speech which deals with the need for co-operation between the State Hospital Association and the State Medical Association, written by Mr. James R. Neely, who was at the time Executive Director of the South Carolina Hospital Association. It was presented before the Alabama Hospital Association. Although Mr. Neely is now with the American Hospital Association in Chicago, his article presents ideas that are timely.

I. *Why Co-operation Is Needed*

- A. Hospital associations have become an essential part of our hospital business.
- B. Our complex social structure causes an interdependence which makes isolation impossible.
- C. Hospitals must do business with third party purchasers and social agencies and can no longer be independently self-sufficient.
- D. Hospitals have had to unite, merging activities and sharing knowledge and talent, for greater economy and efficiency.

II. *External Problems*

- A. Routine internal operating problems are important, but certain external forces have an even greater eventual effect on hospital operations, and these same forces are of equal concern to physicians. These include:
 1. The amount and kind of service third parties wish to buy.
 2. The amount third parties pay for the service.
 3. The degree to which professional employees keep abreast of technical advances.
 4. The public image of hospitals collectively.
 5. The kind of regulations imposed by approval and licensing agencies.These forces can be met *only* by group action.
- B. Efficiently run hospitals enable the physician to provide quality care and also affect the volume of the physician's practice.

III. *Productivity*

- A. The relative number of physicians to patients is moving in inverse ratio to the complexity of medical practice, though a reduction in ratio might be desirable if it increased productivity.
- B. Productivity can be increased through:
 1. Centralization of patients.
 2. Increased delegation to qualified aides and technicians.
 3. Increased use of mechanical diagnostic and treatment aids.These things can be done effectively *only* in a hospital.

- C. Higher income through increased productivity can eliminate increased unit charges to patients.
- D. Physicians should be interested in hospital associations since they affect the ability of hospitals to run well.

IV. *What Does a Hospital Association Want From a State Medical Association?*

To find the answer, consider the following:

1. Do state medical and hospital associations have reason to co-operate?
If so, we must identify areas where co-operation will be productive.
2. What might be each organization's respective role in co-operative action?

To answer the first question, let's look at the two organizations' purposes:

1. That of the South Carolina Medical Association is:
"The purposes of this association shall be to federate and bring into one compact organization the entire medical profession of the State of South Carolina and to unite with similar associations in other states to form the American Medical Association; to extend medical knowledge and advance medical science; to elevate the standards of medical education and to secure the enactment and enforcement of just medical laws; to promote friendly intercourse among physicians; to protect them against imposition; and to enlighten and direct public opinion in regard to the great problems of medical care so that the profession shall become more capable and honorable within itself and more useful to the public in the prevention and cure of disease and in prolonging and adding comfort to life."
2. That of the South Carolina Hospital Association is:
"to promote the welfare of the people of South Carolina through aiding and encouraging the provision of hospital services to patients in the most efficient and economical manner possible."

V. *Are There Differences?*

Are there, in these two statements of purpose, inherent differences to contraindicate a close working relationship?

- A. One apparent difference is one only of semantics. The Medical Association's statement includes what the Hospital Association lists elsewhere as objectives. They say they will endeavor to carry out the objec-

tives of unity, education, research, public relations, etc. in order to achieve their basic purpose, namely, to enable the medical profession to become "more useful to the public in the prevention and cure of disease and in prolonging and adding comfort to life."

- B. Another difference is that the Medical Association is one of individuals rather than institutions. This means that it has an additional mission of promoting its members' personal welfare. A parallel would be the American College of Hospital Administrators, whose members' personal welfare is given weight.

This difference does not invalidate the reason for co-operation of our two associations. On the contrary, if hospitals affect the individual's effectiveness, it is to the physician's personal advantage to have a good hospital available. The idea of a good hospital existing without good physicians is too ridiculous to discuss. Since the respective associations strengthen their members' ability to perform, then even the personal interests of the members are served.

- C. A third difference is in the variance of authority granted to the two national associations. The American Hospital Association is separate and independent from the state hospital associations with no more legal tie than an affiliation agreement that says we will co-operate because we have the same purpose and objective. The American Medical Association, though, is a federation of state medical associations deriving its authority by grants from the state associations. While recognizing this difference, it should not affect the relationship between a state medical and hospital association.

VI. Similarities

Now that we've seen the differences, let's look at the similarities. Our purposes are nearly identical. We are both in business to improve the health of the people of South Carolina by improving services. Since our co-operative projects will improve our peoples' health, our state associations, by co-operating, would be more true to their purposes.

VII. Protective Co-operation

Now that we've established reasons for co-operative action, let's identify some productive areas. The "Ten Point Program of the South Carolina Medical Association" (May, 1959, *The Journal*) and the statement of objectives of the South Carolina Hospital Association contained in our bylaws furnish pertinent source references.

- A. *Our respective lobbying programs.* Our legislators are affected by public opinion and our lobbying can be strengthened by our public information programs. In South

Carolina our lobbying programs are often done co-operatively because of the personal relationship between me and the executive secretary of the Medical Association. Uniquely, he is also an attorney, vice president of South Carolina Blue Cross, and chairman of the board of one of our large hospitals. Our Associations don't always agree but at least each knows the other's stand on legislative proposals. In areas of agreement there is good activity co-ordination. An example is the state's broad MAA program enacted last year. Neither Association could have gotten it passed alone.

- B. The broader program of public education evidences need for a close working relationship. If both organizations speak as one, their words have greater impact. Technical or professional reasons require that some public education programs be conducted independently, but even here each Association gains through advance knowledge of the other's planning.
- C. Hospital planning needs co-operation. The optimum quantity of hospital facilities, in correct proportion, needs to be accessible to every person. Physicians can gain from efficient, solvent community hospitals resulting from properly co-ordinated planning of facilities distribution. Both Associations are represented on the Hospital Advisory Council of the State Board of Health which guides Hill-Burton policies, but much closer liaison is needed in our state, between the Associations on the distribution of facilities. And consideration of the topic cannot be done out of context with the distribution of physicians in the state.
- D. Both organizations are directly interested in developing good educational programs for paramedical hospital workers, involving sub-professional training, continuing education for graduate professionals and formal programs for undergraduates.
If programs are to meet needs, the Associations need co-operative effort including exploration of nursing school standards, recruitment, and definition of the respective roles of physicians and hospitals in conducting education programs.
- E. Co-operative effort would benefit the activity of upgrading the quality of hospital care. The South Carolina Medical Association lists its program, "to strive for the highest standards of professional care in the hospitals in the State."
The South Carolina Hospital Association lists its objective, "to encourage and assist hospitals to become fully accredited by all pertinent accrediting agencies."

These programs are parallel and could be performed by close co-operation. An example is that of the Hospital Association's Accreditation Aid Teams which help non-accredited hospitals make corrections needed for accreditation. These could be more effective if jointly sponsored.

F. Still another area in which there is compelling reason for close co-operation is the financing of health care services for the public.

1. Our Blue Cross and Blue Shield Plans would be stronger if we co-ordinated our support activities, and there is no question about the need for strong Blue Cross and Blue Shield Plans if our voluntary health care system is to survive.
2. The Welfare Department's program would run more smoothly if we jointly recommended policies.
3. Hospitals would be strengthened through the two Associations' joint delineation of financial responsibility for indigents not covered by an agency.

G. Co-operative action would benefit certain research projects. Some studies can't be made otherwise. An example is a hoped for study of hospital discharge data to determine why our utilization rates are among the nation's highest. This study will be useless without the medical profession's interest and support. Their judgement is essential for proper analysis of data. Some studies, however, can best be made independently, involving the respective organizations' own particular spheres of interest and knowledge.

Summary

Now, to stop and summarize, we see a need for co-operative action between our Associations in seven broad areas:

1. Legislation
2. Public Education
3. Planning the Distribution of Hospital Facilities, Including Some Consideration of the Distribution of Physicians
4. Education of Workers in the Health Field
5. Upgrading Standards of Professional Services in Hospitals
6. Improving the Financing of Hospital Care
7. Some Areas of Research

Activities that would not benefit from co-operative programs are few. I could identify two. The first is the development and conduct of education pro-

grams to upgrade technical skills of doctors and non-medical workers in hospitals. Hospitals wouldn't help plan a conference on surgical techniques. Physicians would not attempt to teach uniform cost finding to hospital bookkeepers. The second area involves the organizational operation of the two Associations themselves and includes setting the budget, defining the duties of the secretary, promoting membership and improving communication with fellow members.

The last step is to decide each organization's role in co-operative activities. First and foremost, it is essential that each Association maintain its own organizational identity. Second, both Associations must approach joint projects with the primary aim of improving the health care of patients.

It would be foolhardy to propose specific projects or methods of how to best organize working bodies for selected projects. These must be determined locally and will not bear generalization.

There is one organizational creature I would highly recommend. We do not have it in South Carolina. I think we need it and perhaps we may have it some day. This creature is a joint policy committee having representation from the top level of both Associations, preferably from the officer level. This committee probably should not be the only level at which liaison is maintained, but in my opinion, it is an essential starting place. The legislative committees of the two Associations, for example, no doubt would benefit from regular joint meetings, but the top policy committee should be in a position to take the "big look" at the total program of each Association and decide in which areas there is a mutuality of interest and a need for co-operation.

In closing, I would like to make just one qualifying remark. I have necessarily had to draw on our experience in South Carolina for examples to illustrate some of the points in this talk. I have, quite naturally, picked examples of joint activities that have worked. This doesn't mean South Carolina has the ideal situation. In fact, the only direct liaison we have at present is the friendly working relationship that exists between the executive secretary of the Medical Association and me.* This is an area where every state has much room for growth—yours, mine and all of them.

*Since this speech was first given, efforts have been made in this direction. On November 21, 1963, the first meeting was held of the Joint Public Education Committee, composed of representatives of the South Carolina Hospital Association, South Carolina Medical Association, and South Carolina Blue Cross - Blue Shield. The Medical Care for the Aged pamphlet which you recently received represented the first joint project resulting from this committee's efforts.

Condensed by Robert E. Tomlin, Professional Relations Manager, South Carolina Blue Cross - Blue Shield.

MEDICAL COLLEGE OF SOUTH CAROLINA
PSYCHIATRY INSTITUTE
APRIL 3 - 4, 1964

9:00 A. M. — REGISTRATION

9:30 A. M. — WELCOMING — H. Rawling Pratt-Thomas, M. D., President, Medical College of South Carolina and J. J. Cleckley, M. D., Professor & Chairman, Department of Psychiatry.
9:45 A. M. — "The Physician & Psychiatric Disorders." Daniel Blain, M. D., President Elect, American Psychiatric Association.
10:15 A. M. — "Partners in Healing." James A. Knight, M. D., Professor & Chairman of Psychiatry & Religion, Union Theological Seminary, New York City.
10:45 A. M. — "Dynamics of Alcoholism." Vermelle Fox, M. D., Medical Director, Georgian Clinic Alcoholic Rehabilitation Service, Atlanta, Georgia.
11:15 A. M. — "Management of the Common Emotional Problems of Childhood and Adolescence." William F. Sheeley, M. D., Chief, APA — GP Education Project, Washington, D. C.
11:45 A. M. — "'O Wad Some Power the Giftie Gie Us, To See Oursel's As Ithers See us!'" Floy Jack Moore, M. D., Professor & Chairman, Department of Psychiatry, The University of Mississippi Medical Center, Jackson, Mississippi.

LUNCH

WORKSHOPS — 2:00 to 3:15 P. M.

- I. Topic Area: "Patient - Nurse Relationship."
Speaker: Miss Shirley Middleton, Mental Health Nurse Consultant, Department of Health, Education & Welfare, Atlanta, Georgia.
Moderator: William S. Hall, M. D., Superintendent, South Carolina State Hospital, Director, South Carolina Mental Health Commission, Columbia, South Carolina.
Discussant: To be announced.
- II. Topic Area: "Psychosomatic Medicine."
Speaker: Floy Jack Moore.
Moderator: William C. Miller, Jr., Assistant Professor of Psychiatry, Medical College of South Carolina.
Discussant: To be announced.
- III. Topic Area: "Attributes of Effective Pastoral Counseling." James A. Knight.
Moderator: George Orvin, M. D., Associate in Psychiatry, Medical College of South Carolina.
Discussant: Obert Kempson, Chaplain, South Carolina State Hospital, Columbia, South Carolina.

INTERMISSION

Workshops — 3:30 to 4:45 P. M.

- IV. Topic Area: "Alcoholism." Vermelle Fox, M. D., Medical Director, Georgian Clinic, Alcoholic Rehabilitation Service.
Moderator: Joseph H. Marshall, M. D., Associate Professor, Department of Psychiatry, Medical College of S. C.
Discussant: Mr. Jerry McCord.
- V. Topic Area: "Social Workers Functions In Comprehensive Mental Health Programs."
Speaker: William G. Hollister, M. D.
Moderator: Miss Joanna S. Jenkins, ACSW, Psychiatric Social Worker, Medical College of South Carolina.
Discussant: Miss Elyse McKeown, Mental Health Consultant in Psychiatric Social Work, South Carolina Mental Health Commission, Columbia, South Carolina.
- VI. Topic Area: "Common Psychiatric Problems in General Practice." William F. Sheeley, M. D.
Moderator: R. Ramsey Mellette, Jr., M. D., Director, Child Psychiatry Unit, Medical College of S. C.
Discussant: George Durst, M. D., Professor of General Practice, Medical College of South Carolina.

APRIL 4, 1964

9:30 A. M. — Talk — "Building Comprehensive Community Mental Health Programs." William G. Hollister, M. D., Chief, Research Utilization Branch, National Institute of Mental Health, Bethesda, Maryland.
10:00 A. M. — "Recognition of Depressive Equivalents." Frank J. Ayd, Jr., M. D., Chief of Psychiatry, Franklin Square Hospital, Baltimore, Maryland, and Faculty of Pontifical Georgian University, Rome, Italy.
10:30 A. M. — to be Announced.

WORKSHOPS — 11:00 A. M. to 12:15 P. M.

- I. Continuation of Workshop by Miss Shirley Middleton on Psychiatric Nursing.
- II. Topic Area: "Psychopharmacological Drugs."
Speaker: Frank J. Ayd, Jr., M. D.
Moderator: J. J. Cleckley, M. D.
Discussant: Edward Burn, M. D., South Carolina State Hospital.
- III. Topic Area: "Avenues for Research in Psychology."
Speaker: To be announced.
Moderator: Junius M. Rowe, Ph.D., Asst. Prof. of Clinical Psychology, Medical College of South Carolina.
Discussant: To be announced.

**EIGHTH GREENVILLE POST-GRADUATE SEMINAR
TUESDAY, WEDNESDAY AND THURSDAY
APRIL 14, 15, 16, 1964**

GUEST SPEAKERS

Dr. James Henry Ferguson, Professor of Obstetrics & Gynecology, University of Miami, Miami, Florida
Dr. Peter Gazes, Assistant Professor of Medicine, Medical College of South Carolina
Dr. Clifton K. Meador, Professor of Endocrinology, University of Alabama
Dr. Gordon McHarty, Clinical Professor of Medicine, Louisiana State University, School of Medicine
Dr. H. Rawling Pratt-Thomas, President, Medical College of South Carolina
Dr. John B. Bobear, Professor of Medicine, Louisiana State University, School of Medicine
Dr. Robert Greenblatt, Professor of Endocrinology, University of Georgia, School of Medicine
Dr. Ben Gendel, Professor of Medicine, Emory University, School of Medicine
Dr. George C. Prout, Professor of Urology, Medical College of Virginia

Tuesday, April 14, 1964

8:00 — Registration
9:00 — Dr. Meador — Uses and Abuses of Steroid Therapy.
10:00 — Dr. Gazes — Cor Pulmonale
11:00 — Dr. Ferguson — Risks of Neglecting the "Suspicious" Pap Smear and a Recommended Procedure to Follow
12:00 — Dr. Bobear — Diagnosis and Treatment of Chronic Bronchitis and Emphysema
12:40 — Question and Answer Period—
Dr. Meador, Dr. Gazes, Dr. Ferguson, Dr. Bobear
1:10 — Luncheon — Dr. McHarty — Newer Concepts in the Evaluation of Diverticulitis
2:30 — Dr. Prout — Our Experiences with Renal Transplants
3:30 — Dr. Pratt-Thomas — Toxoplasmosis
4:10 — Question and Answer Period—
Dr. Pratt-Thomas, Dr. Prout, Dr. McHarty
7:00 — Poinsett Club — Social Hour
8:00 — Buffet
9:00 — Dance — Music by Sam Arnold's "Seminar Serenaders"

WEDNESDAY, APRIL 15, 1964

9:00 — Dr. Meador — A Practical Clinical Approach to the Diagnosis and Treatment of Hirsutism
10:00 — Dr. Ferguson — Our Thoughts on Ectopic Pregnancy
11:00 — Dr. Bobear — Recent Clinical Advances in Pulmonary Diseases
12:00 — Dr. McHarty — Hepatitis and Its Sequelae
12:40 — Question and Answer Period—
Dr. Meador, Dr. Ferguson, Dr. Bobear, Dr. McHarty
1:10 — Luncheon — Dr. Gazes — Pre-operative and Post-operative Management of Surgical Patients with Heart Disease
2:30 — Dr. Prout — Current Concepts in the Management of Prostatic Cancer
3:30 — Dr. Greenblatt — New Concepts in the Treatment of the Menopause
4:10 — Question and Answer Period—
Dr. Gazes, Dr. Prout, Dr. Greenblatt
7:00 — Country Club — Social Hour
8:00 — Banquet — Guest Speaker — Dr. Greenblatt — Endocrinology of Biblical Days

THURSDAY, APRIL 16, 1964

9:00 — Dr. McHarty — Benign Diseases of the Esophagus
10:00 — Dr. Bobear — The Value of Several Pulmonary Tests in the Practice of Medicine
11:00 — Dr. Gendel — Some Unusual Anemias
12:00 — Dr. Ferguson — Our Approach to the Recent Advances in Obstetrics & Gynecology
12:40 — Question and Answer Period—
Dr. McHarty, Dr. Bobear, Dr. Gendel, Dr. Ferguson
1:10 — Luncheon — Dr. Meador — Pictorial Atlas of Endocrinology
2:30 — Dr. Gazes — Recent Advances in Coronary Artery Disease
3:30 — (To be announced later)
4:10 — Question and Answer Period—
Dr. Meador, Dr. Gazes

SCMA ANNUAL MEETING — MAY 5, 6, 7, 1964

ANNUAL BANQUET OF THE ALUMNI ASSOCIATION ON TUESDAY, MAY 5.

News

Association of American Physicians and Surgeons

The Interim Meeting of the House of Delegates of the Association of American Physicians and Surgeons, Inc. will be on April 3 and 4, 1964 at the LaSalle Hotel in Chicago. Admiral Ben Moreell, USN, Ret., Chairman, Board of Trustees, Americans for Constitutional Action, will speak at the banquet on Friday evening.

Ophthalmology Congress

The Thirty-Seventh Annual Spring Congress in Ophthalmology will be held at the Gill Memorial Eye, Ear and Throat Hospital in Roanoke, Virginia, on April 6 through 9, 1964.

William S. Hall Psychiatric Institute

The South Carolina Mental Health Commission and the South Carolina State Hospital held a dedication ceremony of the William S. Hall Psychiatric Institute in Columbia on January 28, 1964. The Institute is named for the present State Mental Health Director, who has done so much to improve conditions in this field.

Greenville Seminar

The Eighth Greenville Post-Graduate Seminar will be held on April 14-16.

Dr. J. T. Wilson

Dr. John T. Wilson has been elected chief of the medical staff of the Conway Hospital for 1964.

Dr. Leon Banov

The new *Current Pediatric Therapy*, edited by Sydney Gellis and Benjamin Kagan, contains an article on Lymphogranuloma Venereum by Leon Banov, Jr., of Charleston.

Dr. Augusta Willis

Dr. Augusta E. Willis of Charleston was made a fellow of the American College of Radiology at the group's annual meeting in Arizona on February 7.

Dr. Willis was graduated from the Medical College of South Carolina. She is a member of the staff of Baker Memorial Hospital and on the courtesy staff of the Medical College Hospital and Roper Hospital in Charleston.

Fellowships in Public Health For Pediatricians

The University of Michigan School of Public Health at Ann Arbor offers, with the assistance of the Children's Bureau, a number of fellowships which cover tuition fees and living allowances. A program

of study in Maternal and Child Health is offered, as well as a special course in what is termed "Community Pediatrics." The latter concerns itself with social, cultural, economic aspects of medical care for children and other related approaches.

Inquiry should be addressed to Secretary of the Faculty, School of Public Health, University of Michigan, Ann Arbor, Michigan.

American College of Physicians

The American College of Physicians will hold its 45th annual session in Atlantic City, N. J., April 6-10.

Drs. Martin and Buxton

James B. Martin, M. D. and Julian T. Buxton, Jr., M. D. announce the removal of their offices to 84 Halsey Boulevard, Charleston.

AAP

The 1964 Spring Session of the American Academy of Pediatrics will be held April 20 to 22 at the Sheraton Hotel in Philadelphia.

Dr. Mims

J. Lloyd Mims, M. D. announces removal of his office to 3404 Navajo Street, Charleston Heights. Practice limited to Diseases of the Skin.

Academy of Pediatrics Recommends Two Emergency Antidotes

The Academy's Subcommittee on Accidental Poisoning believes that the plan developed in Kalamazoo, Mich., by Dr. Frederick Margolis and local pharmacists for the ready availability of syrup of ipecac is one that might be profitably used by most pediatricians.

The pharmacists distribute free through the offices of the pediatricians half-ounce bottles of syrup of ipecac, which the pediatricians give to parents of small children to keep at home. Each bottle is labeled "Syrup of Ipecac for Inducing Vomiting" and carries the notice, "In case of poisoning, telephone pediatrician immediately, before administering."

When an accident occurs, the parents telephone the pediatrician, and if vomiting is indicated, he recommends that the entire half ounce dose be taken (by a two or three-year-old), followed by water. He then asks that the parents bring the patient to the office or hospital, if indicated.

The Subcommittee also believes that it would be well to recommend that parents of young children obtain a small supply of powdered activated charcoal and keep it on hand for possible emergency administration in case of accidental poisoning (again after first telephoning the pediatrician).

Doctors In The News 50-Year Doctors Honored

Two Orangeburg area physicians were presented 50-year awards at a meeting of the Edisto Medical Society at Berry's-on-the-Hill. They were Dr. Henry Stuckey of Bamberg and Dr. Harry Raysor of St. Matthews.

Dr. Charles E. Aimar was honored as "Young Man of the Year" in Darlington at the Junior Chamber of Commerce annual Banquet.

Dr. LeRoy B. Dennis, Jr., Bishopville physician was appointed to the Lee County Board of Education.

Dr. Mack S. Bonner, anesthesiologist at Aiken County Hospital, has been appointed instructor in cardio-pulmonary resuscitation for Aiken County by the South Carolina Heart Association.

Dr. Robert E. Jackson will be chairman of the Clarendon County 1964 Heart Fund campaign.

At the last meeting in December of the Colleton County Hospital staff, Dr. Luke L. Erwin, Jr. was elected chief of staff for a two year term and Dr. Carroll Brown was elected secretary.

Dr. Sam Watson of Clemson is Chairman of the local March of Dimes.

The first step is yours— your gift to Easter Seals



**255,000 CRIPPLED CHILDREN AND ADULTS WERE
TREATED LAST YEAR AT EASTER SEAL CENTERS**

South Carolina Hospital Association

Since early in 1963, the Hospital Financing Division has been negotiating with the State Department of Public Welfare to bring about revisions in the Department's method of calculating payments to hospitals.

Revisions have been made in the Department's procedure for calculating payments, effective January 1, 1964.

Essentially, the major changes in the reimbursement policies are: determination of cost for different size hospitals, rather than for all hospitals in the state, and increasing the ceiling to 115% of the average cost of reporting hospitals within the three bed size groups. It is understood that all other state agencies will revise their reimbursements rates to coincide with the new DPW rates.

The Board of Trustees of the Association has recommended to member hospitals that contracts with the Department of Public Welfare now be signed. The Board also expressed its appreciation to Dr. Rivers for his cooperation in bringing about a more equitable form of reimbursement for hospitals.

Authorizations for hospital care under MAA program — Heretofore, initial authorizations under the MAA program have been limited to 8 days, and needed hospitalization beyond the initial 8 days had to be justified by a supplemental authorization. This regulation has been changed and initial authorizations have now been extended to 20 days. Hospitalization beyond 20 days must be justified by a supplemental authorization. The maximum number of days of hospitalization available to MAA beneficiaries is still 40.

South Carolina Medical Association

With the help of the AMA, the Association has distributed to all the public libraries of the state three booklets. One is "The Case Against the King-Anderson Bill," another is "Financing Medical Care" and the third is "Federalized Health Care for the Aged?"

S. C. Medical Association Is Now Sponsoring Series Of 30 Minute TV Programs

As a part of the education program of the South Carolina Medical Association, a series of 30-minute television programs for public viewing is being produced for showing over the regular outlets in the state. These programs, moderated by Dr. Dale Groom of the Medical College of South Carolina, feature a panel of experts discussing varied health topics of interest to the public.

For example, a panel discussion on disorders of the circulation in the arms and legs has been produced and is already being shown in some parts of South Carolina. Other tapes are in the making. Where possible, advanced notice will be given to the newspapers before a tape is shown in a given area.

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Dr. B. F. Sowell To Head Heart Drive

Dr. B. F. Sowell will be chairman of the Pageland 1964 Heart Fund campaign, it was announced by the South Carolina Heart Association.

Dr. Claude C. Sartor

Dr. Claude C. Sartor has announced the opening of his office for the practice of pediatrics at 2011 Hampton Street, Columbia.

He is a graduate of Clemson College and the Medical College of South Carolina. He served his internship in Pittsburgh and his pediatric residency at Columbia Hospital. He served two years in the Navy Medical Corps.

Before returning to Columbia, he was associated with the Cosby Pediatric Clinic in Johnson City, Tenn.

Civil Defense Posts

Dr. W. H. Hamilton has assumed the responsibilities as director of the Health, Medical and Mortuary service of Civil Defense, Spartanburg.

Dr. James C. Loftin has been named to assume the responsibility for Civil Defense Radiological Defense Section.

Dr. Crawford Heads Heart Association

Dr. R. L. Crawford, Lancaster physician, has accepted chairmanship of the Lancaster County

Heart Association and will also serve as head of the 1964 Fund Campaign.

S. C. Hospital Units Reorganized

The S. C. Mental Health Commission has announced that it has reorganized the two units of its one big state hospital into two separate hospitals.

Dr. William S. Hall, state mental health director, called the action another step in the commission's program of decentralizing South Carolina's mental treatment facilities.

For years there have been two units of the S. C. State Hospital — the Columbia unit in Columbia and the State Park unit six miles outside Columbia. They shared the same staff.

Now, Hall said, instead of one big hospital with 6,500 patients there are two hospitals, each with slightly over 3,000 patients. He said they should become "more manageable and offer better, more personalized patient care."

The former Columbia unit will be known as the S. C. State Hospital. The former State Park unit will be called Palmetto State Hospital.

Dr. Robert Wentz To Locate In Lockhart

The Board of Directors of Hope Hospital, Lockhart, has announced that Robert M. Wentz, M. D., who is now doing an internship at McLeod Infirmary, Florence will come to Lockhart and begin the practice of medicine on or about July 6, 1964.

Recent reports suggest...insulin and sulfonylureas may accelerate lipogenesis,^{1,5}...serum "insulin" levels are often elevated in obese diabetics^{2,3,6}...DBI (phenformin HCl) reduces high blood sugars, lowers elevated "insulin" levels, tends to reduce body weight toward normal.^{1,3,7-9}

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tablets 25 mg.

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the obese diabetic (ketoacidosis-resistant), DBI (phenformin HCl) with a proper diet: **A.** acts to reduce high blood sugar without increasing fat synthesis or weight gain. **B.** does not increase already elevated endogenous insulin levels; may, lead, act to restore more normal levels. **C.** favors reduction of weight.

the ketoacidosis-resistant obese diabetic not amenable to diet alone, hypoglycemic DBI (phenformin HCl) appears to prevent weight gain or reduce adiposity, factors which otherwise tend to make blood sugar control more difficult and increase the likelihood of complications. However, in the ketoacidosis-prone diabetic, insulin is still the essential hypoglycemic agent.

Summary: Indicated in stable adult diabetes, sulfonylurea failures and unstable diabetes. Gastrointestinal side effects occurring more often at higher dosage levels abate promptly upon dosage reduction or temporary withdrawal. Occasionally insulin-dependent patient will show "starvation" ketosis (acetoneuria without hyperglycemia) which must be differentiated from "insulin-lack" ketosis, and treated accordingly. Use with caution in severe liver disease. Not recommended without insulin in acute complications (acidosis, coma, infections, gangrene, surgery). Consult product brochure for full information.

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S. VITAMIN & PHARMACEUTICAL CORPORATION 800 SECOND AVENUE
NEW YORK, N.Y. 10017

Meeting of York County Doctors and Lawyers

A total of 51 lawyers and doctors attended a joint meeting of the York County Medical Association and the York County Bar Association at the Elks Club in Rock Hill.

The bar association had 27 representatives. The medical association was represented by 24 doctors.

The group discussed mutual problems that arise when doctors appear on the witness stand. Topics included medical reports and doctors and the medical witness.

AMA Actions

The following actions of the AMA House of Delegates were taken at the meeting of December 4, 1963, and are of interest to all state and county medical societies.

Membership Eligibility

The Reference Committee on Amendments to Constitution and Bylaws recommended that a new resolution be not adopted and the House reaffirm its position adopted in 1950 and a copy of the 1950 resolution should again be sent to each constituent and component medical society.

Adopted June 1950 — Restrictive Membership Provisions

"Whereas, This House of Delegates recognizes that certain constituent and component societies of the

American Medical Association have had or now have restrictive provisions as to qualification of membership based on race and that this question is of deep concern to many interested parties; and . . .

"Resolved, That constituent and component societies having restrictive membership provisions based on race study this question in the light of prevailing conditions with a view to taking such steps as they may elect to eliminate such restrictive provisions."

Board of Trustees Supplementary Report K

Hospital Staff Privileges for Negro Physicians

(Because of the relationship of Resolution 14, "Membership Eligibility," the resolution adopted in June, 1950, entitled, "Restrictive Membership Provisions," and Board of Trustees Supplementary Report K, "Hospital Staff Privileges for Negro Physicians," we are also referring this report adopted by the House of Delegates, December, 1963, to all state and county medical societies. *It is suggested that this report be brought to the attention of all hospital professional staffs in your county.*)

"Resolved, That members of the medical staff of every hospital, where the admission of physicians to hospital staff privileges is subject to restrictive policies and practices based on race, be urged to study this question in the light of prevailing conditions with a view to taking such steps as they may elect to the end that all men and women professionally and ethically qualified shall be eligible for admission to hospital staff privileges on an equal basis, regardless of race."



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Resolution 12

Opposition to Amendment to Food, Drug and Cosmetic Act Dealing with Proof of Efficacy

"Whereas, The Kefauver-Harris Act of 1962, amending the Federal Food, Drug and Cosmetic Act, gives the U. S. Food and Drug Administration for the first time the authority to evaluate the effectiveness of drugs; and

"Whereas, This Act empowers the FDA to keep a drug from the market, or to remove it from the market, if the FDA determines, in its opinion, that a drug is not effective; and

"Whereas, Only the medical profession after widespread usage, can ultimately determine the true effectiveness of a drug; and

"Whereas, Authorizing a federal agency to deprive physicians of the use of drugs which they may wish to use in their practice is an unwarranted intrusion into the practice of medicine and an improper interference with the physician's responsibilities and prerogatives; and

"Whereas, The American Medical Association strongly opposed this grant of authority to a federal agency when this legislation was pending before the Congress; and

"Whereas, This Act can only operate to the detriment of the practice of medicine and the public health; and

"Whereas, Attempts are currently being made to include similar control mechanisms for all medical devices and implants; therefore be it

"Resolved, That the American Medical Association attempt to have these provisions authorizing the determination of the effectiveness of drugs by the Food and Drug Administration removed from the Kefauver-Harris Amendment; and be it further

"Resolved, That every effort be made to prevent the enactment of similar federal regulatory legislation with regard to devices and implants; and be it further

"Resolved, That all constituent and component medical associations be urged to join in this effort by soliciting the support of their Senators and Representatives."

(Adopted)

Resolution 18

"Resolved, That the House of Delegates of the American Medical Association recommend to the Public Health Service, U. S. Department of Health, Education and Welfare, that applicants for community health project grants be required to consult with and document the reaction of the local county medical society and affected community groups in all community projects relating to personal health services."

(Adopted)

Resolution 21

"Resolved, That the House of Delegates of the AMA reaffirm its previously adopted recommendation to all state medical societies that they become active in the U. S. and State Chambers of Commerce; and be it further

"Resolved, That a similar recommendation be made to all county medical societies so that they too might be encouraged to become active in local, state and U. S. Chambers of Commerce programs."

(Adopted)

"The American Medical Association's Committee on Blood believes that component and constituent medical societies should be informed of proposed and existing blood banking services within the community and should offer guidance to them. In the opinion of the Committee it is desirable that the organization of new blood banking programs and the modification of existing ones should have, in the interest of public health and safety, the approval of the county or district medical society and should be coordinated with existing approved blood banking facilities."

(Adopted)

Radiology Refresher Courses

The radiology department of the Medical College of South Carolina is offering a series of short courses in film interpretation, primarily for general practitioners. Each will be composed of an afternoon of lectures and demonstrations. The first will be devoted to the chest x-ray film and it will be given April 17, 1964. Lectures will start at 1:00 p. m. Groups will be limited to ensure informality. Anyone interested in attending may write Dr. H. S. Pettit, Medical College Hospital, Charleston, S. C. 29401

Proposed Amendments to the Community Mental Health Services and the Interstate Compact Acts

1962 CODE OF LAWS

Community Mental Health Services

Amend Section 32-1034.27, subsection (1) so as to read as follows:

- (1) "Be the administrative agency for the community mental health services programs; and it shall form a body corporate in deed and in law with all the powers incident to corporation."

Amend Section 32-1034.26.

Following the words "general public" at the end of second sentence insert the following proviso:

"Provided, that at least two members of the board shall be medical doctors, licensed to practice medicine in this State, who at the time of appointment shall be members of and in good standing with their local medical society."

Amend Section 32-1034.27, subsection (2).

Add the following proviso: after the words "merit system" — "Provided that one such employee shall be a medical doctor, licensed to practice medicine in this State, preferably one qualified in the specialty of psychiatry and who shall be the overall director of the community mental health services program."

Interstate Compact

Amend Section 32-1055.

Add the following proviso:

"Provided that no person, a legal resident of this state, shall be transferred to another state without written consent of his or her next of kin, custodian or legal guardian; provided further that if there be no next of kin, custodian or legal guardian, the compact administrator is authorized to initiate transfer proceedings."

Dr. J. L. Bozard

Dr. B. F. Sowell has announced that Dr. Jesse Lagrande Bozard will join him as a partner in his medical practice in Pageland.

Dr. Bozard is a native of Orangeburg. He graduated from Clemson College and served four years with the U. S. Air Force mostly on West Coast Bases.

He received his medical training at the Medical College of South Carolina and interned at the Greenville General Hospital. He has practiced in Greenville for the past 3½ years.

Dr. B. C. Elliott

Dr. Bruce C. Elliott was named Clover's Young Man of the Year at the Junior Chamber of Commerce's annual distinguished Service Award banquet January 24.



Dr. R. C. Smith

Dr. R. Cathcart Smith, Conway physician and one of the founders of Coastal Carolina College, has accepted the appointment as 15th Judicial Circuit representative to the Board of Directors of the South Carolina Board of Education. The circuit includes Horry and Georgetown counties.

AAPHP Stand on King-Anderson Bill

The following telegram was sent by the Secretary-Treasurer, Dr. Joseph M. Bistowish to the Honorable Wilbur D. Mills, Chairman, House Ways and Means Committee, Washington, D. C., on November 27, 1963: "The American Association of Public Health Physicians, in recent session, reaffirmed its opposition to the King-Anderson Bill and similar Social Security approaches to Medical Care for the Aged. We feel that private insurance and the Kerr-Mills plan can adequately solve the problem."

Marlboro County Medical Society

The 43rd annual New Year's meeting of the Marlboro County Medical Society was held January 16 at the Marlboro Country Club.

At this meeting the Society was host to the Pee Dee Medical Society.

The speaker for the evening was Dr. William H. Muller, Jr., a native of Dillon and now professor and chairman, Department of Surgery, University of Virginia Medical Center. His topic was "The Surgical Management of Acquired Valvular Heart Diseases."

Dr. J. C. Hedden

Dr. J. C. Hedden of Spartanburg received the Silver Beaver award presented by Palmetto Council, Boy Scouts of America.

Death

Dr. J. C. Milford

Dr. J. Clarence Milford, 75, died in Anderson Memorial Hospital January 24.

Dr. Milford, who lived in the Long Branch community, had practiced medicine in that area for 48

years. He was well known throughout the county.

He was graduated from the Emory University School of Medicine in 1915. He returned to his native community to begin his practice and had lived there ever since.

Book Reviews



DISEASES OF THE SKIN, by George Clinton Andrews, M. D. and Anthony N. Domonkos, M. D. 5th Edition. W. B. Saunders Co., Philadelphia. 1963. 749 Pp. Price \$16.50.

Appearing ten years after the last edition, this new volume includes a co-author, Dr. Domonkos, Dr. Andrews' associate, and

changes in the entire format of the book. The popular and easier read double column type is used. The pictures are fewer but better.

Other changes are shown in proper reclassification of many diseases, especially in respect to etiology. The greatest changes have been in therapy. There is a notable decrease in the number of prescription formulae given, indicating that even the dermatologist is compounding fewer prescriptions and depending more on commercial products. However, Dr. Andrews still lists, too often, old and obsolete forms of therapy along with the newer recommended treatments.

This has been a standard and popular text for many years and this new edition will assure its position as one of our best. Not only will the dermatologist want it for ready reference, but for the student and general practitioner who want more than a small manual but not the large and more expensive text, this is certainly the book of choice.

Kathleen Riley, M. D.

ALCOHOL AND CIVILIZATION, edited by Salvatore P. Lucia. McGraw-Hill Book Company, Inc., 1964. Pp. 416. Price \$3.95.

This is a report of a symposium. The contributors are of high caliber, including such people as Dr. Balboni of Rome, Dr. Karl Bowman of the University of California, Dr. William Dock, Dr. Leonard Goldberg, Dr. Chauncey Leake and others of equal standing. The conference has been reported and

organized by Dr. Salvatore Lucia, who has contributed other works on the subject of alcohol, particularly on the use of wine.

One contributor goes along with the continental belief that the ailing and aged, and indeed almost anyone, should have a regular daily ration of alcohol in the form of wine. The problems of overindulgence are discussed from many angles. Dr. Leake emphasizes that alcohol has long since proved its civilizing influence and its value in medicine. Problem drinking and suggestions for the education of young people in the proper use of alcohol are among the topics discussed.

An interesting and readable discussion of a subject which is of much concern to the physician and the public.

JLW

CROSSEN'S SYNOPSIS OF GYNECOLOGY. Edited by D. W. Beacham & W. D. Beacham. Sixth Edition. C. V. Mosby Company, Saint Louis. 1963. Price \$7.50.

No synopsis can please a man working in a specialized field; at best it can serve only to remind an infrequent worker in that field of a broader knowledge he once had. But the popularity of the book (this is the 6th edition) shows the need for such a handbook. So the Devil must be given his due.

Basic lesions — relaxations, fibroids, cervical malignancy, etc.—are adequately covered. The same can be said for basic physiology and endocrinology. Newer aspects such as cytology and chromosomal variants are touched on.

Some of the old illustrations leave much to be desired but some excellent new ones are present. A remarkable feature is a section on contraception, rare in medical books. The bibliography is up to date.

This type of text per se lacks detail and discussion. And regardless of how good it may be typologically, it is inherently dangerous for a student.

J. M. Wilson, M. D.

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CURRENT PEDIATRIC THERAPY, by Sydney S. Gellis, M. D., and Benjamin M. Kagan, M. D. W. B. Saunders Company, Philadelphia and London. 1964. Pp. 747. Price \$16.00.

Changes and improvements in therapy constitute one of the most active current phases of medicine. Because of this rapidity of change it is difficult to keep a book on the subject up to date. The editors have done an exceptionally good job in this respect, arranging and correlating some 320 articles on almost all the therapeutic procedures of pediatrics. These articles vary from a few lines to several pages in length and deal strictly with treatment as summarized by almost as many authors, all of recognized standing in pediatrics.

Few articles are documented, but this is not an encyclopedic volume. It should be of great practical value as an accurate book of reference.

JIW

CLINICAL EXAMINATIONS IN NEUROLOGY by Members of the Sections of Neurology and Section of Physiology, Mayo Clinic and Mayo Foundation for Medical Education and Research, Graduate School, University of Minnesota, Rochester, Minnesota. Second Edition published 1963 by W. B. Saunders Company. \$8.50.

This book is the product of 15 members of the Mayo Clinic staff. Beginning with a discourse on the special aspects of the history and neurological examination, the reader is taken systematically through an evaluation of function of the cranial nerves, motor system, reflexes, sensory system, mentation and language, and the autonomic system. The authors have resolved the conflicting aims of brevity and breadth of coverage admirably. The result is a guide which provides the clinical practitioner an understanding of the background of anatomy and function upon which neurological abnormalities occur and, at the same time, is in a style and terminology the clinician will find appealing. An improvement over the original edition is a section on the special problems in pediatric neurological examination.

Special charts of muscle and sensory innervation and a chapter on anatomy and function of the individual muscles provide valuable references. There are separate chapters on ancillary diagnostic procedures. The index is excellent.

This reviewer has only minor criticisms to make. The text as a whole lacks somewhat in continuity—a reflection of the multiplicity of authors which is compensated for by the high quality of their individual products. Bibliography has been omitted except for two chapters and has not been up-dated from the original edition. The emphasis on forms for recording clinical data and the elaborate sample forms provided will probably meet with limited interest.

Rhett Talbert, M. D.

DIAGNOSTIC LABORATORY HEMATOLOGY. By George E. Cartwright. Third Edition. Grune & Stratton, Inc., New York, London, pp 333. Price \$8.75.

The third edition of this laboratory hematology manual is again directed to the procedures used in small laboratories or in a doctor's office. It very clearly and precisely describes the various tests routinely used in blood disorders and evaluates the errors or pitfalls which have to be considered.

It can be highly recommended for students and any practitioner who either has to perform or evaluate laboratory results.

Charlton deSaussure, M. D.

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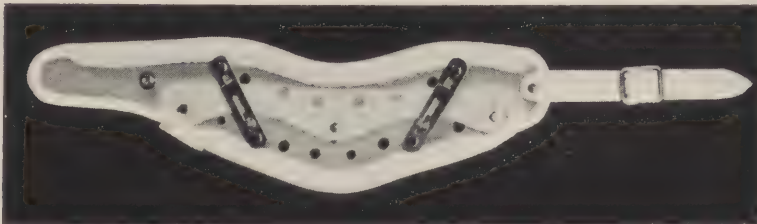
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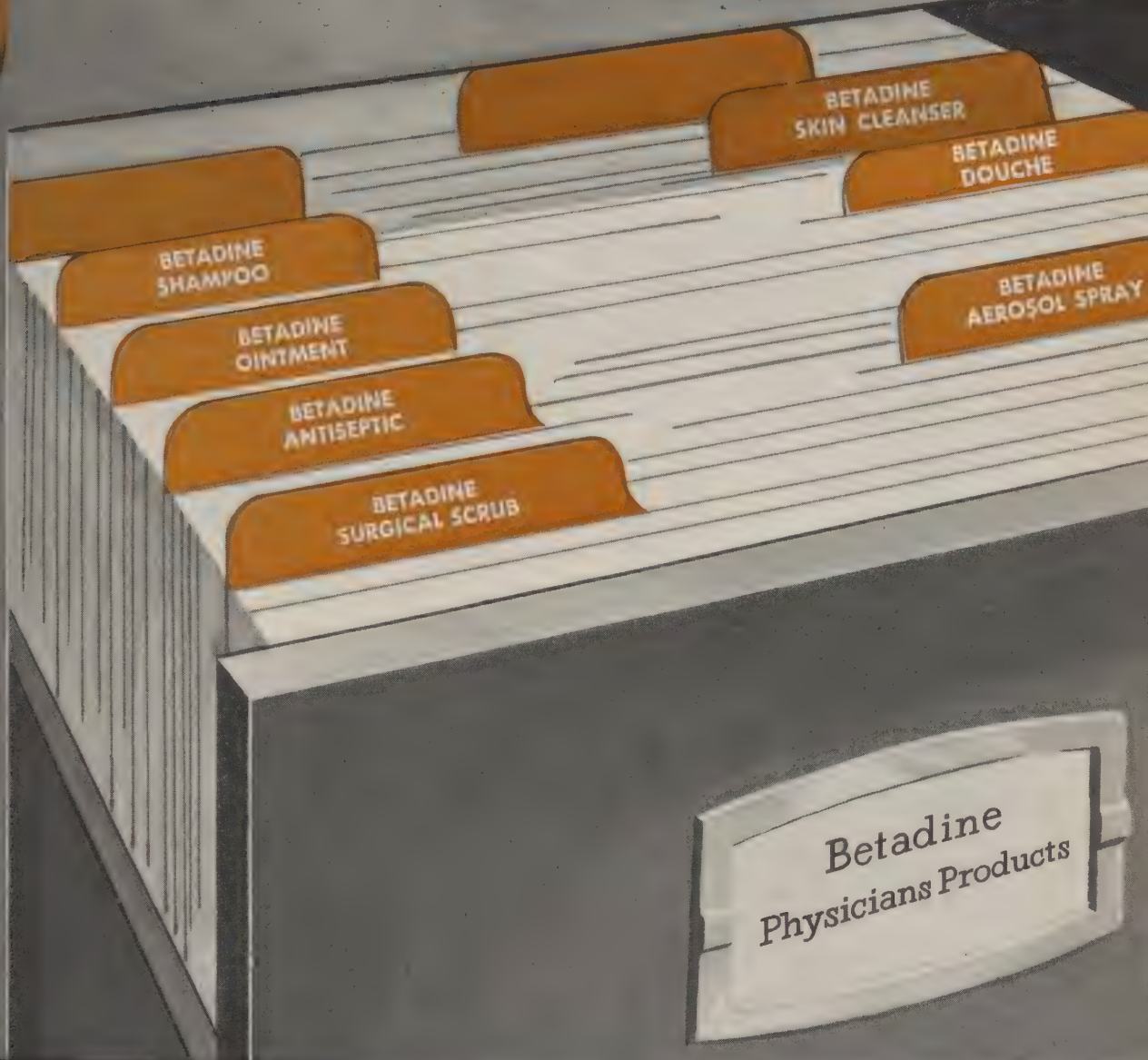
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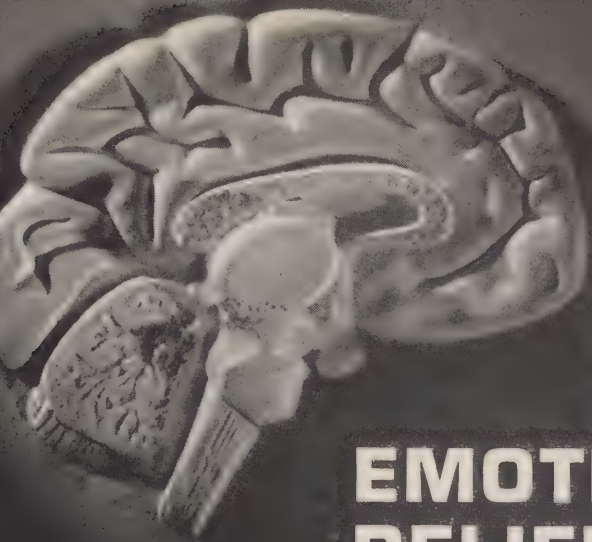
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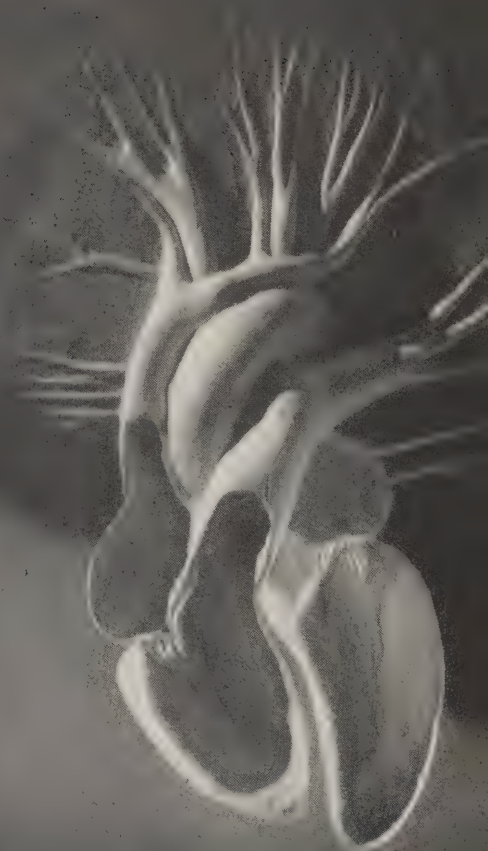
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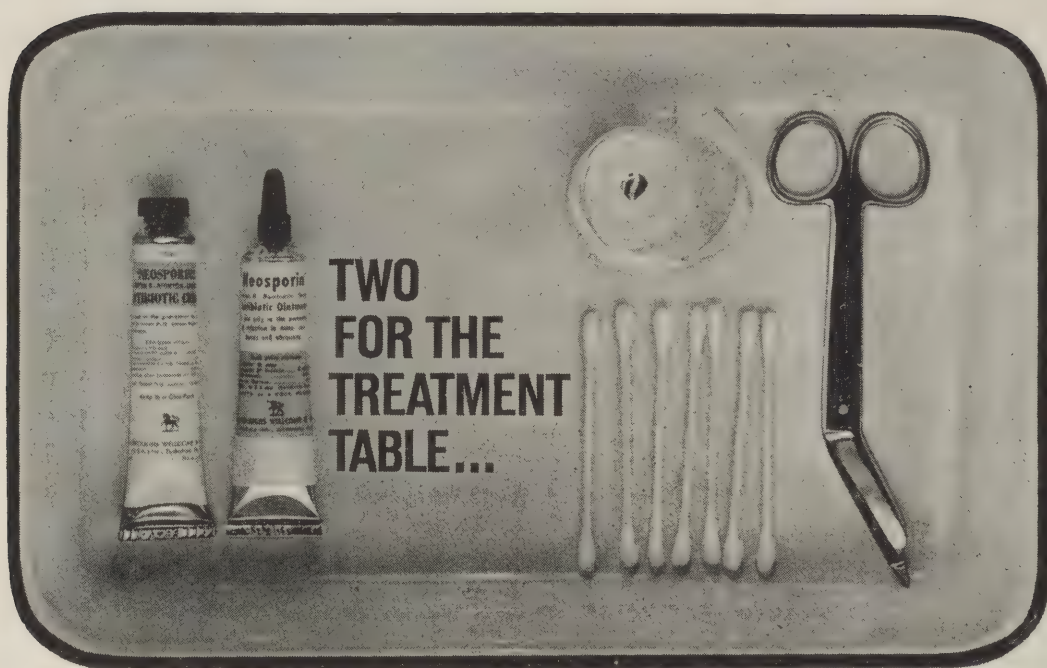
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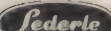
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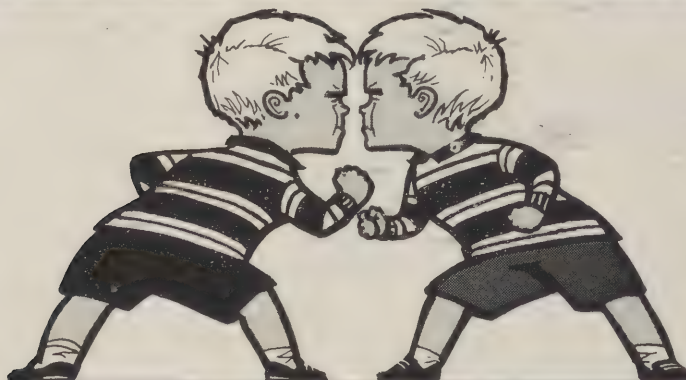
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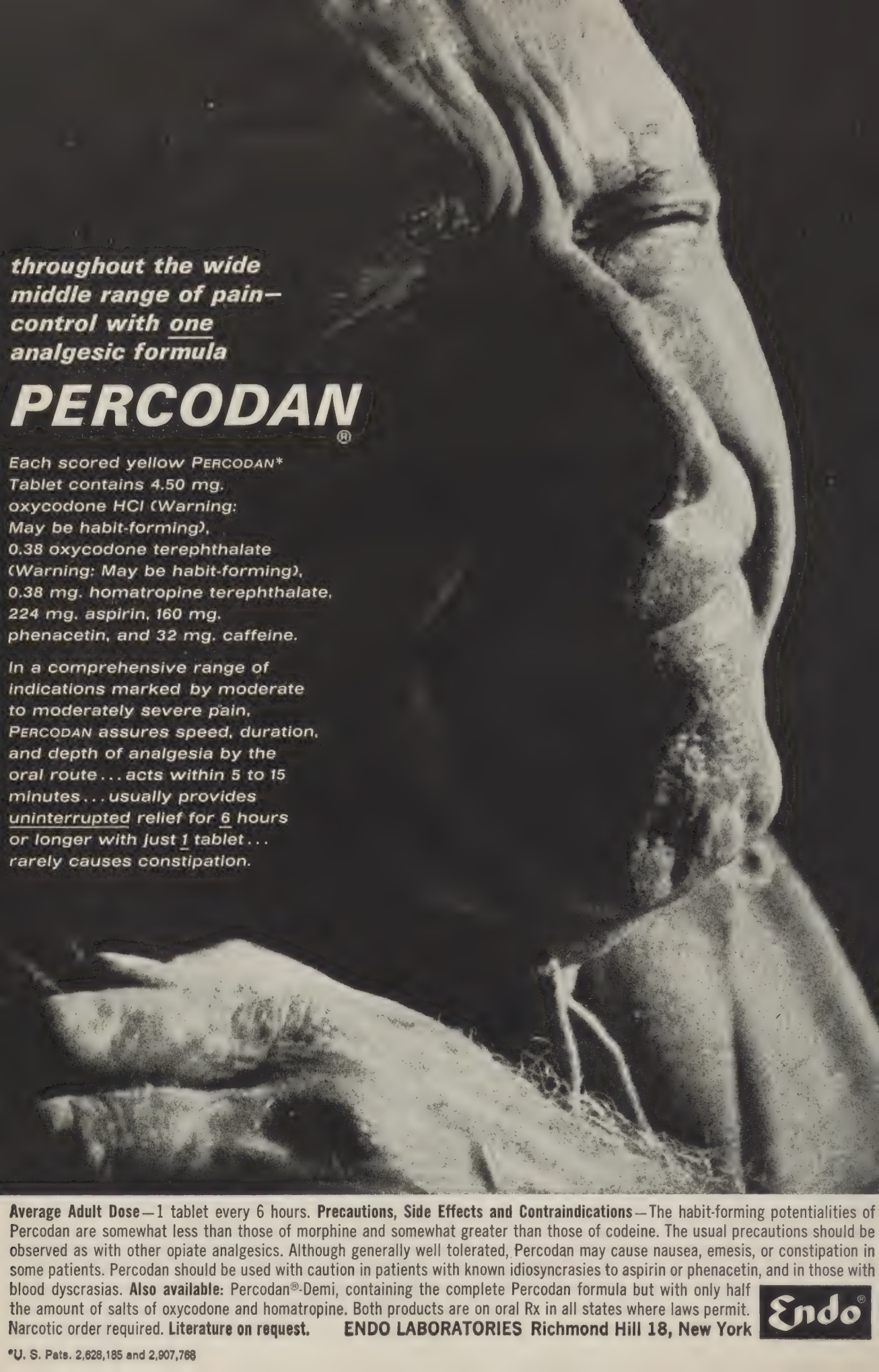
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References: (1) Moyer, J. H., and Heider, C.: *Am. J. Cardiol.* 9:920 (June) 1962. (2) Brest, A. N., and Moyer, J. H.: *Pennsylvania M. J.* 63:545 (Apr.) 1960. (3) Berry, R. L., and Bray, H. P.: *J. Am. Geriatrics Soc.* 10:516 (June) 1962. (4) Hutchison, J. C.: *Current Therap. Res.* 4:610 (Dec.) 1962. (5) Feldman, L. H.: *North Carolina M. J.* 23:248 (June) 1962.

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*Roseman, E.: *Neurology* 11:912, 1961.

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Length—Short articles of about 2,500 words (about 8 typewritten pages, double spaced) are preferred. Longer articles ordinarily will defer to the shorter ones in schedule of publication.

Manuscripts—Manuscripts should be typewritten, double spaced, and the original and a carbon copy submitted.

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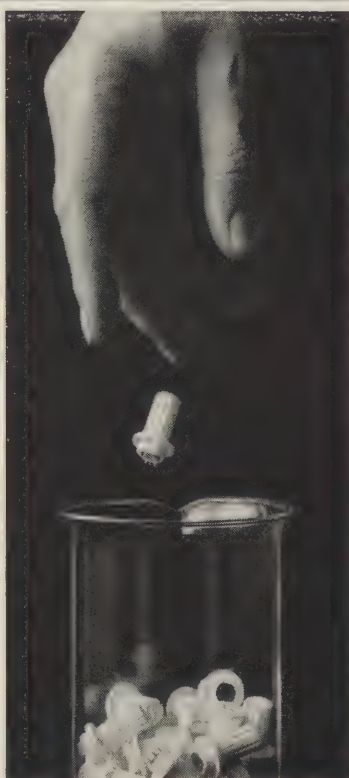
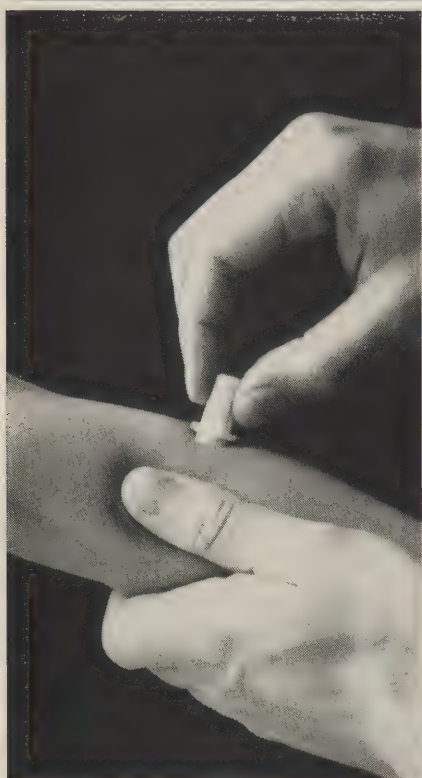
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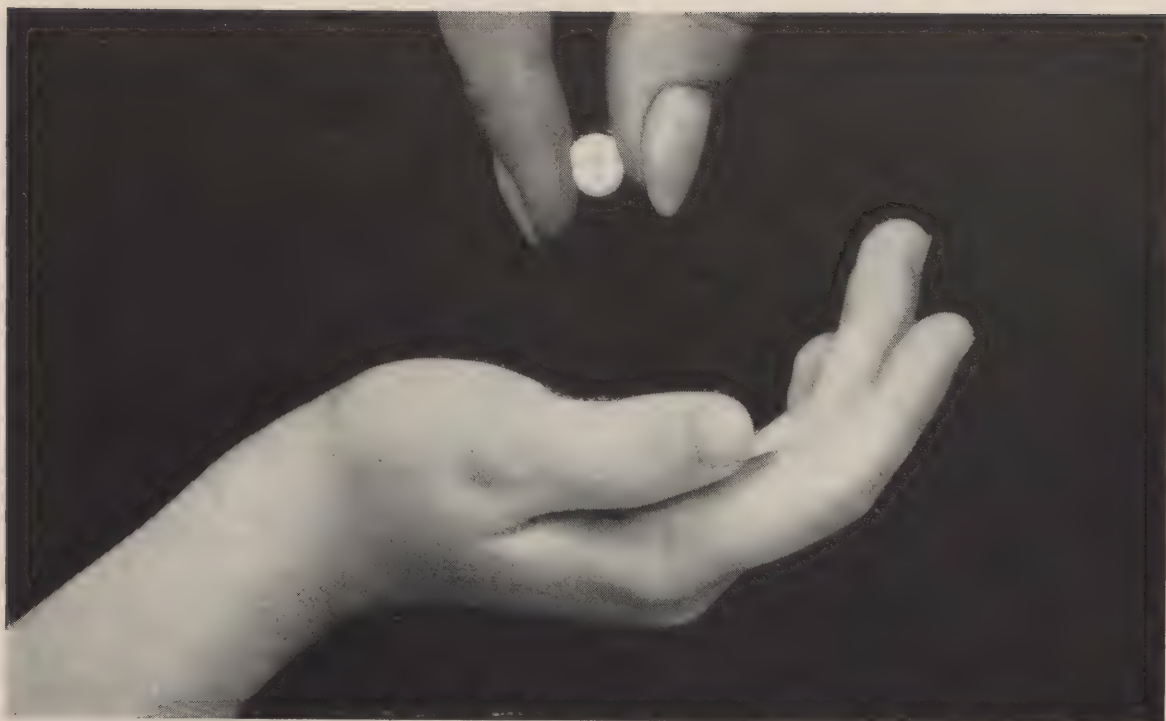


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*Cohen, et al: J.A.M.A., 165:225, 1957.

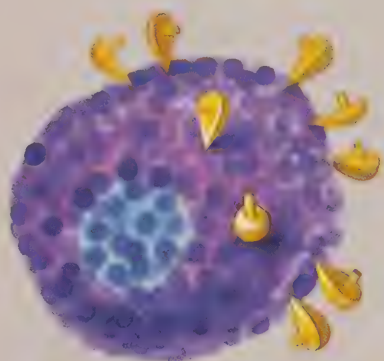
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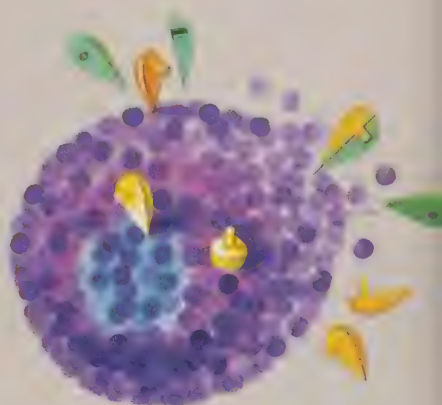
It is generally accepted that a complex antigen-antibody reaction underlies allergy. The reaction may be visualized in this simplified graphic form:



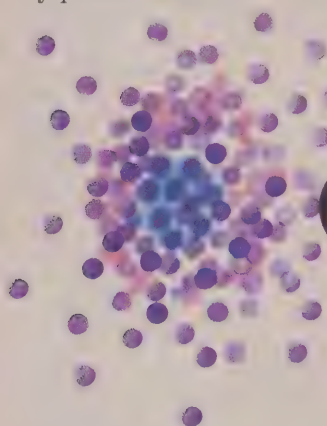
At first exposure to antigens (green) specific antibodies (yellow) are formed chiefly by plasma cells.



Circulating antibodies in the blood stream may become attached to mast cells in the tissues.



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*Schiller, I. W. and Lowell, F. C.: New England J. Med. 261:478, 1959.

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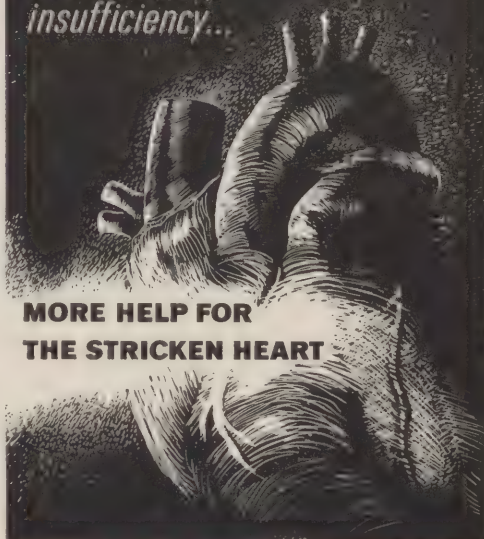


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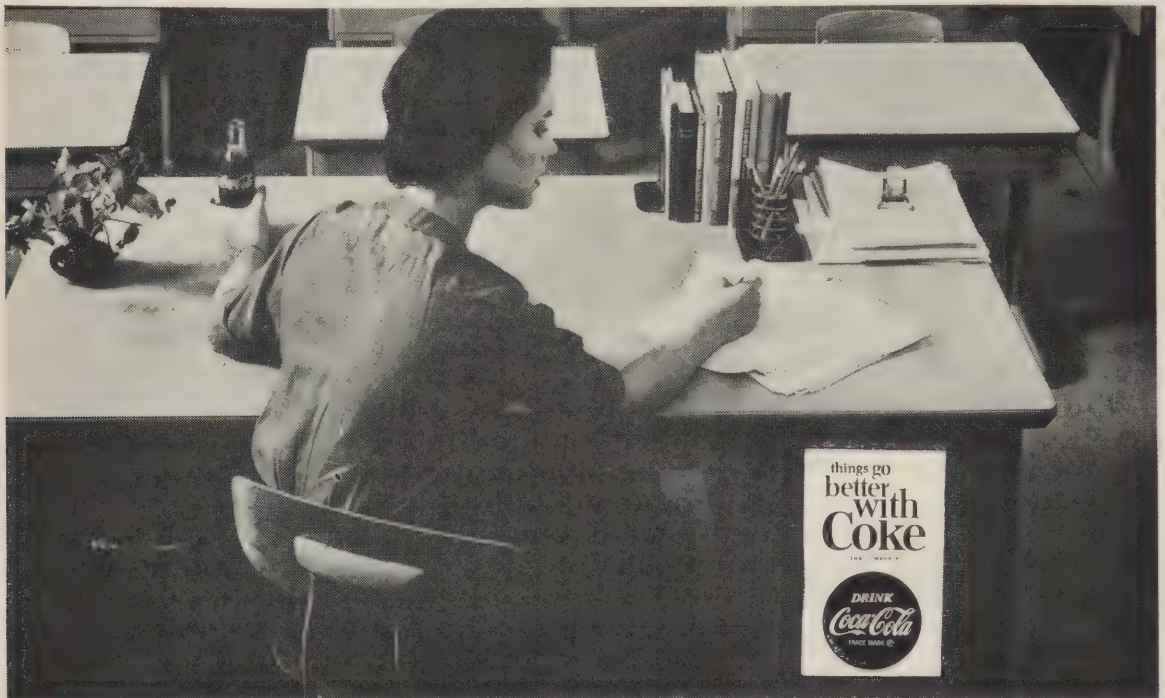
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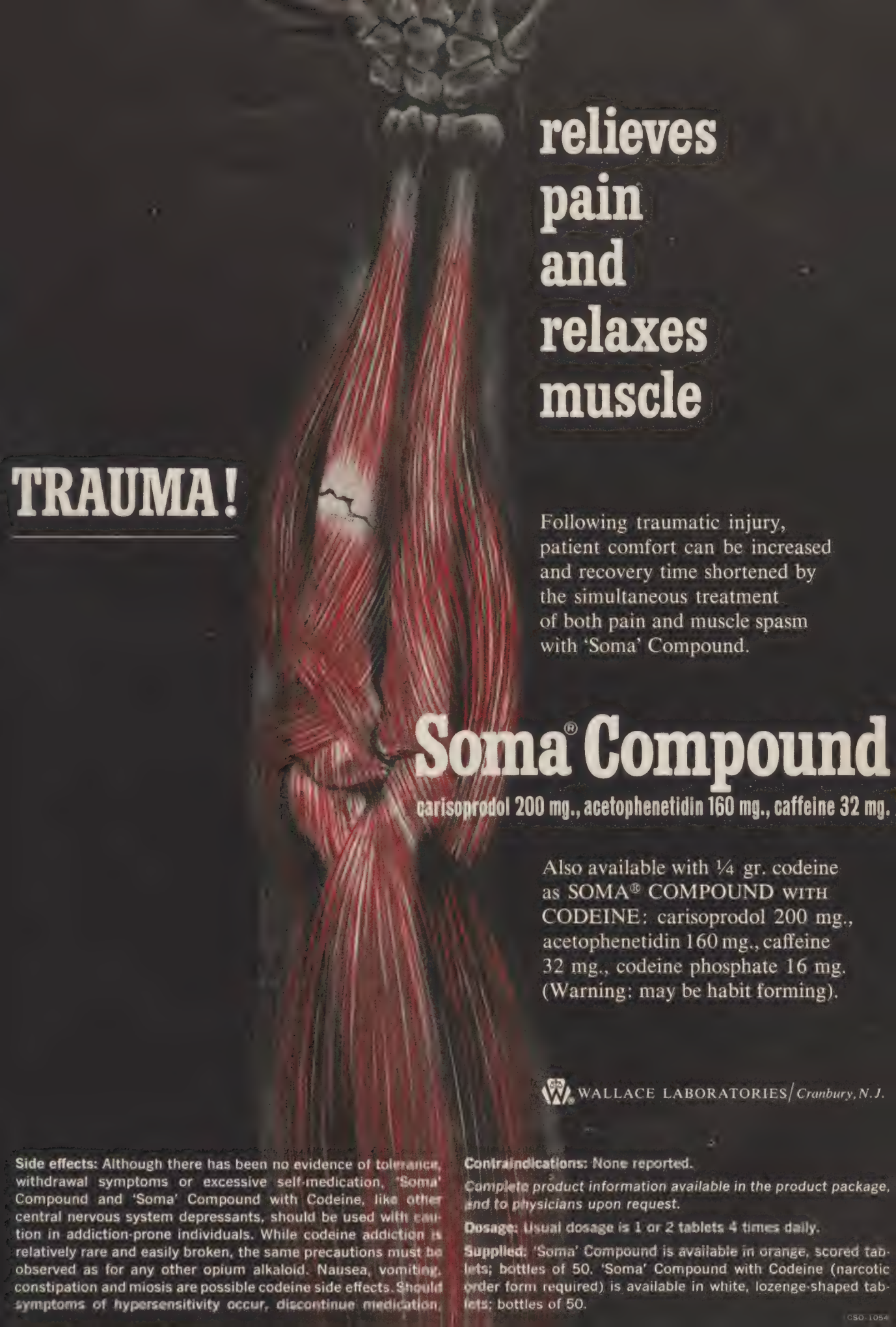
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The Journal of the South Carolina Medical Association

VOLUME 60

April, 1964

NUMBER 4

THE USE OF CHEMOTHERAPEUTIC AGENTS IN THE TREATMENT OF CHILDHOOD CANCER *

CHARLES P. DARBY, M. D.**

Charleston, S. C.

Cancer in children from ages one to fourteen ranks second only to accidents as the leading cause of death. Most childhood cancers are not amenable to surgery because of their generalized dissemination. In most instances, the only means of therapy available is chemotherapy. Although we do not yet have the ideal chemotherapeutic agents that will constitute an absolute cure for cancer, there have been in recent years some favorable advances.

In respect to neuroblastoma, a very common malignant tumor in children, there have been reports of cure rates in the literature as high as 50%, achieved by giving x-ray, surgery, and chemotherapeutic agents in combination with each other. In the last ten years the life span of acute leukemics in childhood has been prolonged from a few months to sometimes several years. Many malignant lymphomas in childhood have shown some outstanding therapeutic responses. The purpose of this paper is to cite the experiences that have been encountered at the Medical College of South Carolina during the past two years in our newly organized chemotherapy program for children.

Neuroblastoma

Case 1. This 1½ year old colored boy was brought

*The chemotherapeutic program for children was supported by a grant from the York County Community Chest Cancer Fund.

**Clinical Instructor, Department of Pediatrics, Medical College of South Carolina.

in with a marked proptosis of the right eye which his family had noticed for the past month. The right pupil was dilated and fixed and the right superior margin of the retina appeared blurred on fundoscopic examination. The liver was palpable five cm below the right costal margin and there were no other abdominal masses palpable. X-ray films of the skull revealed some irregular destruction of the inferior orbital margins of the right orbit, and films of the abdomen with intravenous pyelograms revealed some depression of the left kidney and a vague shadow with mottled calcific deposits over the left kidney.

Bone marrow aspiration revealed numerous large malignant cells appearing in rosette formation. The patient received a small dose of x-ray therapy to the right orbit and following this he was started on intravenous cyclophosphamide, a dose of 8 mg per kg. After receiving intravenous cyclophosphamide for one week he was started on a maintenance dose of 50 mg twice each day orally.

Eight months after receiving therapy the patient seemed to be completely asymptomatic. The proptosis was very slight on the right and there was no other evidence of any other metastatic tumor growth.

Case 2. This patient was found at birth to have enlargement of the liver and shortly after birth open biopsy confirmed the diagnosis of neuroblastoma.

The patient was treated with super voltage x-ray therapy to the liver area and made a very favorable response which lasted about one year. At about one year of life she began to have enlargement of the liver and she received a second dose of x-ray. At about two years of age she began to develop some cervical and supraclavicular adenopathy. Biopsy in the cervical area at this time revealed a metastatic lesion. At two and a half years of age, because of her multiple metastasis it was no longer thought that x-ray therapy could be of benefit and she was started on Methotrexate. The Methotrexate seemed

to have little beneficial effect and she was then started on cyclophosphamide, 10 mg per kg intravenously, daily for five days, and then she was put on oral cyclophosphamide, 50 mg each day.

Her overall wellbeing and activity seemed to improve tremendously and there was some shrinkage of her nodes. Several months later, however, she began to get some enlargement of her mediastinal lymph nodes resulting in respiratory obstruction and consequent death at three years of age.

Discussion

Neuroblastoma is a tumor arising from the sympathetic chain located in the neck, thorax, and abdomen, including the adrenal medulla. The majority of these tumors occur under the age of five years. Distant metastases occur early to brain, bone marrow, and orbit.

Gross and Farber¹ have been able to achieve a cure rate of 36% in all patients entering the hospital with this diagnosis. Even more encouraging is the fact that they have achieved a cure rate of 70% in all patients without bony metastasis. They have established that the best therapeutic approach is surgical excision as complete as possible and subsequent x-ray and chemotherapy. Even patients with proven extensive liver metastasis obtained a cure rate of 67%. The most important single factor is early diagnosis and early therapy because once the tumor reaches bone marrow the prognosis becomes extremely grave.

These two cases both received some favorable response to cyclophosphamide. This is consistent with the findings of others who are working in the field of chemotherapy. At the present time cyclophosphamide seems to be the drug of choice in metastatic neuroblastoma in children.

Cyclophosphamide is a potent cytotoxic agent, related to the class of compounds known as nitrogen mustards. The drug was first synthesized in 1957 and since then has been undergoing extensive clinical trials in all types of cancer. It seems to be tolerated extremely well by children, and in neuroblastoma and lymphoma it seems to give a very favorable response.²⁻⁶

Alopecia is a frequent side effect to cyclophosphamide therapy and has been observed

in about 28% of the patients studied. In almost all the cases the hair regrows after the patient has been taking the drug for several months. In both of the above cases the hair disappeared during the initial therapy but reappeared on the oral maintenance dose so that the patient had a normal complement of hair a few months following the initiation of therapy.

During the past few months there have been admitted three other patients with very large primary and metastatic lesions but none of these patients survived long enough to receive cyclophosphamide therapy.

Hodgkin's Disease

Case 1. This colored girl came in at five years of age with a high fever and a hemolytic anemia. A Coomb's test was positive and biopsy of one of her supraclavicular nodes revealed Hodgkin's disease. A chest x-ray film showed mediastinal adenopathy. She responded well to x-ray therapy of the mediastinal area and had very little difficulty for approximately three years. At the end of the three year period she began having intermittent spells of anemia, fever, malaise and inactivity. She was again treated with x-ray to the mediastinum, liver, and spleen but achieved only a poor result with this course of therapy. She was given a course of cyclophosphamide therapy, intravenously, 5 mg per kg, for one week. Her response to the cyclophosphamide therapy was rather dramatic, and for the past 15 months she has been maintaining a normal hemogram, has been active, completely asymptomatic, and is attending school. She has no adenopathy and no hepatosplenomegaly. This patient did have alopecia following her initial therapy but now has a normal growth of hair.

Comments

About 10% of all cases of Hodgkin's disease occur under the age of ten years and in this age group the disease has a much more fulminating course than in older children and adults. Hodgkin's disease is also a curable disease in its early stages. If the disease has not metastasized to regional nodes then surgical excision with x-ray is often curative. If the disease spreads from the localized area into lymph nodes, the prognosis becomes grave; however, in recent years, x-ray and chemotherapy have added many more comfortable years to the survival of these children.⁷ The case recorded here illustrates a very favorable

response obtained with cyclophosphamide and x-ray.

The alkylating agents such as chlorambucil have also been of some benefit in treating Hodgkin's disease. If severe bone marrow depression from Hodgkin's is present, then corticosteroids are of some benefit.

Acute Leukemia

Case 1. This patient became ill at three and a half years of age when he developed ecchymoses and massive hepatosplenomegaly. He soon became anemic and bone marrow examination confirmed the diagnosis of acute stem cell leukemia. The child was started on a high dose of corticosteroids and 6-mercaptopurine. He showed a dramatic response. His liver and spleen regressed to normal size and his hemogram returned to the normal values. He developed some intracranial infiltration of the leukemic process and this was treated with a small dose of x-ray, resulting in a quick relief of his symptoms. After several months of therapy with 6-mercaptopurine, the patient began to lose his remission and his hemoglobin and platelet count began to decrease. He was then started on Methotrexate and his leukemic process showed signs of remission. The remission on Methotrexate lasted approximately four months and then again his blood values began to drop. He received cyclophosphamide for three months but he never achieved a very satisfactory remission. He was then given vincristine sulfate, 0.15 mg per kg of body weight and had an excellent remission; however, he experienced severe peripheral neuritis, abdominal cramps and ataxia which improved when the dosage was decreased. His remission lasted several months, at which time he succumbed to his disease, approximately two years after the diagnosis was established.

Case 2. This 4½ year old colored male showed anorexia, lethargy and a low grade fever. Physical exam failed to reveal any abnormality, and the diagnosis of rheumatoid arthritis was entertained on initial admission. Bone marrow aspiration demonstrated the diagnosis of acute leukemia and the patient was put on corticosteroids and 6-mercaptopurine, 25 mg a day. A complete remission was obtained and after one month his hemogram values had returned to normal. Other than occasional bone pain in the lower extremities, he had little difficulty for the next two months. Although he remained in a complete hematological remission, he began to develop some ocular palsies indicating CNS infiltration. He was treated with intrathecal Methotrexate on one occasion and this seemed to give excellent relief of his neurological findings within a matter of a few days.

Eight months after his disease was diagnosed he lost his remission and failed to respond to increased

dosages of Methotrexate, 6-mercaptopurine, and cyclophosphamide. The patient expired approximately nine months after his diagnosis was established.

Case 3. This six year old colored girl was seen because of a swollen lymph node in the cervical region. She had also been noted to have increased tendency towards bleeding because she had bled profusely after having a tooth extracted. Physical exam revealed extremely large cervical nodes and marked hepatosplenomegaly. Bone marrow aspiration confirmed the diagnosis of acute leukemia and the patient was put on a chemotherapeutic regimen, using steroids and 6-mercaptopurine. Though some degree of remission was obtained it was never complete. She remained asymptomatic until the fourth month of her illness when she began having thrombocytopenia associated with purpura and bleeding from the gums. She developed exceptionally marked lymphadenopathy in both the mediastinal and cervical areas. The patient expired four months after the original diagnosis was established.

Case 4. This 4½ year old colored female was presented to her local physician with abdominal swelling. She became progressively weaker and prior to admission developed dependent edema. On physical examination the spleen, liver, and kidneys were markedly enlarged. The hemoglobin was 9 Gm, and the white blood cell count was 95,000. The peripheral smear revealed 80% immature cells in the myeloid series and there were approximately 5% blast cells. Bone marrow aspiration confirmed the diagnosis of acute granulocytic leukemia.

She was started on prednisone, 60 mg a day, and 12.5 mg of 6-mercaptopurine. She achieved an excellent remission and remained in remission for about 3 months. At this time her drug was changed to Methotrexate but she failed to respond. After the failure to respond to Methotrexate and steroids she was started on vincristine sulfate and again received an excellent remission. At present she is being maintained in excellent remission on 0.5 mg of vincristine every two weeks.

Comments

For the most part the leukemias encountered in childhood fall under the classification of acute leukemia. The nitrogen mustards, with the exception of cyclophosphamide, and irradiation are not indicated or effective. About 80% of the children will obtain some degree of remission with the use of corticosteroids and one of the antimetabolites; that is, Methotrexate or 6-mercaptopurine.

Many different dosage schedules using steroids and the antimetabolites have been tested. Some of the most successful regimens have been:

(1) Beginning therapy with corticosteroids and substituting 6-mercaptopurine when remission or maximum improvement has been obtained. When relapse occurs, steroids are resumed and either 6-mercaptopurine or Methotrexate is begun in larger doses as soon as the response to the steroids is noticed. If no response to the steroids is obtained, then the antimetabolites are begun.⁸

(2) A similar plan to the above, except that after the initiation of therapy with 6-mercaptopurine for three months, Methotrexate is substituted and thereafter the two drugs are alternated every three months. Steroids are again used when a remission is lost.⁹

In those that have become refractory to the antimetabolites about 30% will obtain some degree of remission from cyclophosphamide. A more recent drug, vincristine sulfate (Oncovin—Lilly) has been shown to be effective in treating refractory acute leukemia. Vincristine is an extract of the periwinkle plant but has the disadvantages of having to be administered intravenously each week or two. It also has many side effects such as abdominal cramps, constipation, epilepsy, neuritic pain, ataxia, coma, and many others too numerous to list. The recommended dose is 0.05 to 0.15 mg per kg; however, along with others, we have found that probably the dose should be kept at or below the 0.05 mg per kg.¹⁰ In cases 1 and 4 we received an excellent response in the refractory period with the use of vincristine.

Wallerstein¹¹ recently reported an interesting plan of therapy that shows some promise. He has been able to overcome resistance to the purine antagonist, 6-mercaptopurine, by giving hypoxanthine, a purine base, while the patient is responding to Methotrexate, and reverse resistance to folic acid antagonist by adding folic acid to the succeeding course of 6-mercaptopurine. Using this method some of his patients have responded to as many as three courses of each antimetabolite.

Intracranial infiltration of leukemia occurs in approximately 30% of the cases. This can be treated by the use of small amounts of

irradiation to the skull or spinal cord or small doses of intrathecal Methotrexate may give the same dramatic relief. The CNS involvement, however, tends to recur rather rapidly and it is necessary that the therapy be repeated at fairly frequent intervals.

Of the 20 cases of acute leukemia in childhood that have been treated at the Medical College of South Carolina in the past five years we have actually followed up 13. The average life span following the diagnosis has been 11.5 months. The longest survival time was 31 months and the shortest was 10 days. This is slightly less than the survival rates being achieved by others in this field.

Summary

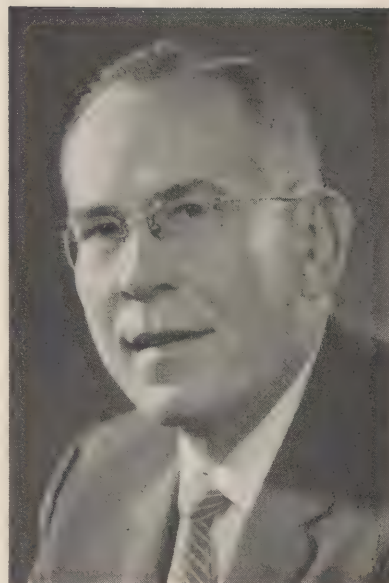
In the past two years we have attempted to organize a chemotherapeutic program for children with malignant diseases. These children are followed closely with frequent blood value determinations to help determine what type and what dosage of drug is required to suppress the tumor but yet leave the bone marrow active enough to support life. Seven of the cases that we have had an opportunity to study are reported here and a brief discussion of the current concepts in the treatment of malignant diseases in children is presented.

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President's Page

Accurate prognosis is often difficult; to try to forecast the future is even more so, but at least one thing is certain; the world, as we know it today will be different tomorrow, next week and next year. The contrast of today with a few decades ago is startling and the rate of change grows faster all the time. It is often hard enough to recognize one of our real problems of today and to guess what they will be in the future is completely impossible. However, in the hope of meeting them adequately, medicine must have some solutions.



The only sensible approach to the difficult issues of today—and of any day—is by the method of trial and error. Solutions will be proposed for real or imaginary problems; our leadership must have the flexibility of thought, either to reject the proposal for substantial reasons, or to accept it on a trial basis. If it does not succeed, counter proposals must be in order. The several current areas in which this method would be pertinent have been discussed in the columns of this Journal. The possibilities in the fields of undergraduate and of postgraduate medical education should be further explored. If the Kerr-Mills Bill is not a sufficient answer to “Medicare” under Social Security, perhaps the income limits and other qualifications of Kerr-Mills legislation are not realistic and might well be broadened. Nursing, as it relates to the practice of medicine, as has been pointed out by Dr. J. D. Guess, presents many problems that are among the most important confronting the medical profession today.

Medicine is by tradition and necessity conservative. However, we cannot shut our eyes to the inevitable changes that will come; we must be prepared to accept those that will not interfere with the basic principles of medical practice and to reject those which will ultimately destroy the doctor-patient relationship and thus be detrimental to the health needs of the community. Regardless of the prevailing political philosophy of the moment, medicine must remain thoroughly honest, true to its own standards, and with a completely open mind. To accomplish our aim and to reach our goal we must remember that

“Tis the set of the sails
And not the gales
Which tells us the way to go.”

Robert Wilson, M. D.

Editorials

The Abused Child

Children have been abused by certain types of people from time immemorial, and unless they are all wiped out by atomic cataclysm, they will continue to suffer injury from inadequate parents. Increased reporting and awareness of the occurrence of trauma in young children resulted in a high level conference at the U. S. Children's Bureau to explore the possibility of abating this unsavory practice. All of those concerned agreed unanimously that something must be done and more specifically that legislation must be obtained to discourage the practice. Already eleven states have passed laws which in essence give immunity to any person reporting the discovery of willful physical abuse of children. This is undoubtedly a proper step, but it will not solve entirely the problem of the basic deficiencies of character in those parents who practice this activity.

The Committee on Child Health of the Association has had this matter under consideration and is proposing that the Association sponsor a model bill to be introduced into the Legislature as soon as possible. This move has the blessing of the Committee on Legislation, and it is hoped that the reception will be a good one. A word to your legislators would be worth much.

Examination of Drivers

At first blush, periodic physical examination of drivers of automobiles would seem to be a sound endeavor. However, the AMA points out that there are 91 million licensed drivers in the United States, and that initial and repeated examinations of this number of people would be a very impractical goal. It is suggested that certain classes of applicants or drivers be checked, viz: when physical impairment is obvious, when a driver has been involved in multiple accidents, when the driver has been refused insurance or

when the driver admits episodes of medical disabilities such as a "blackout."

No particular disease has been implicated in the production of accidents, and therefore the identification of persons with various diseases is of little value in preventing these catastrophes. The young male adult, 16-25 years of age, a group with the fewest physical impairments, has the highest incidence of accidents. Lack of mature judgment seems to be the critical factor.

Speakers

In these days when the importance of telling the story of medicine to the public is so great, a useful service is offered to the profession by Smith, Kline and French Laboratories, Philadelphia, in instruction to physicians from major groups on how to give speeches, how to prepare and illustrate them, and how to organize and operate a Speakers' Bureau program.

This service is offered through a training period extending over two days and is without cost.

Detailed information may be obtained from the SK&F professional service representatives.

Progress in English

The medical profession, either in its embryonic state as students, or as full term physicians has much to offer to the confusion of the English language. Evidence lies in these gems recently culled.

"The patient was not too well cyclopleged and may have to be atropinized."

"An acute hospital."

"A surgical abdomen."

"A paper posthumously submitted." [Posthumous paper or writer? Ed.]

But there is some verve in some of these descriptions; one writer of charts adds enthusiasm to an old term by speaking of "cafe Olé spots"!

**ONE HUNDRED AND SIXTEENTH ANNUAL MEETING OF THE
SOUTH CAROLINA MEDICAL ASSOCIATION
MYRTLE BEACH, MAY 5, 6, AND 7, 1964**

GENERAL PROGRAM

TUESDAY, MAY 5

- 9:00 A. M. Meeting of Council
- 12:30 P. M. Luncheon Meeting, Advisory Committee to Crippled Children
- 2:30 P. M. House of Delegates (Ball Room)
- 4:00 P. M. Special Order to Hear Dr. Annis
- 5:30 P. M. Meetings of Reference Committees
- 8:00 P. M. Annual Banquet and Ball for Alumni Association and Guests

WEDNESDAY, MAY 6

- 9:30 A. M. House of Delegates Resumes (Ball Room)
- 11:00 A. M. Scientific Film (TV Room)
- 12:15 P. M. Adjournment Sine Die
- 12:30 P. M. Alumni Luncheon (Main Dining Room)
- 2:00 P. M. Scientific Session (Ball Room)
- 7:30 P. M. SCALPEL Banquet
- 9:00 P. M. Alumni Association Entertainment (Ball Room)

THURSDAY, MAY 7

- 9:00 A. M. Scientific Session Resumes
- 12:30 P. M. Luncheon Recess
- 2:00 P. M. Scientific Session Resumes
- 5:30 P. M. Drawing for Attendance Prizes and Adjournment

HOUSE OF DELEGATES

Dr. Robert Wilson, Presiding

TUESDAY, MAY 5

- 2:30 P. M. Call to Order
- Invocation
- Report of Credentials Committee
- Opening Remarks by the President
- Introduction of the President-Elect
- Announcement of Reference Committees
- Presentation of Resolutions and Recommendations
- 3:15 P. M. Introduction of Officers and Guests of Woman's Auxiliary
- Reports of Officers
 - The President
 - The Executive Secretary
 - The Secretary
 - The Treasurer
 - The Editor of the Journal
 - The Chairman of Council
 - The Delegates to the AMA
- 4:00 P. M. Special Order to Hear Dr. Annis
- 4:30 P. M. Special Order, The Annual Meeting of the Corporation,
The South Carolina Medical Care Plan

Election of Members to the Board of Directors
The terms of the following members expire:

Dr. A. C. Bozard
Dr. Charles J. Lemmon, Jr.
Dr. Luther M. Mace
Mr. A. P. Nisbet
Mr. Thomas C. Vandiver

Reports of Committees of the Association

(The reports of the Committees will have been published in the Journal and will not be read before the House. Any supplementary remarks by the Chairmen will be heard at this time.)

Report of State Board of Medical Examiners

Report of Executive Committee of State Board of Health

Unfinished Business

New Business

5:30 P. M. Meetings of Reference Committees

(All members of the Association are invited to appear before the Committees considering matters in which they are interested. Meeting places will be posted and announced.)

WEDNESDAY, MAY 6

Dr. Robert Wilson, Presiding

9:30 A. M. Call to Order

Reports of Reference Committees

11:30 A. M. Annual Elections

Officers:

President-elect	Secretary
Vice President	Treasurer

Delegate to the A. M. A.: (2-year term)

The term of Dr. George D. Johnson expires December 31, 1964.

Alternate Delegate to the A. M. A.: (2-year term)

The term of Dr. Charles N. Wyatt expires December 31, 1964.

Councilors: (3-year terms)

Second District—The term of Dr. A. F. Burnside expires. (1954)

Fifth District—The term of Dr. John M. Pratt expires. (1963)

Eighth District—The term of Dr. J. D. Thomas expires. (1961)

Members of Mediation Committee: (3-year terms)

Second District—The term of Dr. Wm. H. Bridgers expires. (1961)

Fifth District—The term of Dr. Ripon W. LaRoche expires. (1961)

Eighth District—The term of Dr. James L. Wells expires. (1961)

Member of Benevolence Fund Committee: (3-year term)

The term of Dr. T. G. Goldsmith expires. (1960)

Members of State Board of Medical Examiners: (4-year terms)

Member-at-large—The term of Dr. H. E. Jervy, Jr. expires.

Sixth Congressional District—The term of Dr. H. S. Gilmore expires.

Members of Hospital Advisory Council to State Board of Health: (4-year terms)

The term of Dr. Roderick Macdonald expires.

The term of Dr. Belton J. Workman expires.

Members of Committee on Legislation and Public Relations:

(3-year terms, to be nominated by Council and elected by the House)

The term of Dr. Donald G. Kilgore expires.

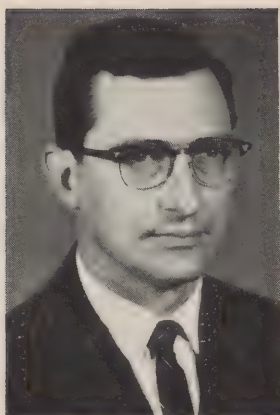
The term of Dr. C. Tucker Weston expires.

Member of Committee on Emergency Medical Care: (5-year term, to be nominated by Council and elected by the House)

The term of Dr. J. Graham Shaw expires.

Selection of Place for 1965 Annual Meeting

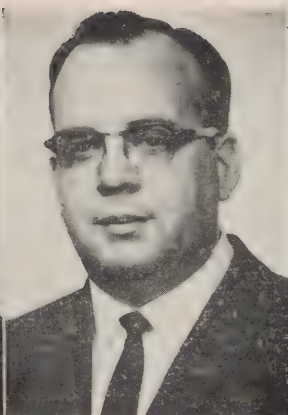
Sine Die Adjournment.



Dr. Lee



Dr. Smith



Dr. Curry



Dr. Saunders

SCIENTIFIC SESSION

WEDNESDAY AFTERNOON — MAY 6

Presiding: Dr. A. C. Bozard, Vice President
South Carolina Medical Association

- 2:30-2:50—Clinical Implications of Vaginal Cytologic Diagnosis—
Dr. Forde A. McIver, Charleston, S. C.
- 2:50-3:10—Thoracic Trauma—
Dr. William H. Lee, Jr., Charleston, S. C.
- 3:10-3:30—The Physical Findings in Acute Myocardial Infarction—
Dr. Donald E. Saunders, Jr., Columbia, S. C.
- 3:30 —Break to visit exhibits.
- 3:55-4:15—Cerebral Angina—
Dr. Hiram Curry, Charleston, S. C.
- 4:15-5:00—Eye Signs of Vascular Disease—
Dr. Lawton Smith, University of Miami. (This presentation sponsored by the South Carolina Heart Association).

THE SPEAKERS

FORDE McIVER, M. D.



Dr. McIver

A native South Carolinian, Dr. McIver graduated from the Medical College of South Carolina, took both his rotating internship and a residency in general surgery at the University of Wisconsin School of Medicine. Following this he spent a year on a surgical fellowship at Karolinska Hospital in Stockholm, Sweden, and was certified by the American Board of Surgery in 1949. Dr. McIver's pathology training was at the Medical College of South Carolina and the University of Wisconsin School of Medicine, and in 1959 he was certified by the American Board of Pathology. He served as Assistant Professor of Surgery and Instructor in Pathology at the University of Wisconsin prior to returning to his alma mater, The Medical College of South Carolina, where he was Assistant Professor in Pathology 1957-62 and has been Associate Professor since 1962.

WILLIAM HALL LEE, JR., M. D.

Dr. Lee was a cum laude graduate of both the College of Charleston and the Medical College of South Carolina. His internship was at Roper Hospital, surgical residency at the Medical College of South Carolina and fellowship in Thoracic Surgery at the UCLA Medical Center in Los Angeles. After two years on the faculty at the University of Tennessee School of Medicine, Dr. Lee returned to Charleston in 1963 as Assistant Professor of Surgery. He is certified by the American Board of Surgery and American Board of Thoracic Surgery, is a Fellow of the American College of Physicians, a member of the Society of Sigma Xi and Alpha Omega Alpha, both honorary medical societies. In 1962 Dr. Lee was appointed a Markle Scholar in Medical Science.

J. LAWTON SMITH, M. D.

Dr. Smith is a native of Greenville, South Carolina, and received his undergraduate education at Emory University. After receiving his medical degree at Duke University he interned at Grady Memorial Hospital in Atlanta, served in the Medical Corps of the U. S. Air Force and took his residency training in ophthalmology at Johns Hopkins Hospital and the Massachusetts Eye and Ear Infirmary. He is certified by the American Board of Ophthalmology.

Dr. Smith's present appointments are Associate Professor of Ophthalmology and of Neurosurgery, and Assistant Professor of Neurology, all at the University of Miami School of Medicine, Miami, Florida.

This guest lecture by Dr. Smith is sponsored by The South Carolina Heart Association.

HIRAM B. CURRY, M. D.

Dr. Curry was born in Midville, Georgia. He is a graduate of the College of Charleston and the Medical College of South Carolina. He served his internship at the Philadelphia General Hospital and was engaged in the general practice of medicine in Jasper, Florida, for six years. His residency in internal medicine was at the VA Hospital in Baltimore, and he was certified by the American Board of Internal Medicine in 1960. He was resident and Teaching Fellow in Neurology at the Medical College of South Carolina from 1959-1961, following which he served a Research Fellowship in Clinical Neurophysiology at the University of Lund, Sweden, and a fellowship on the Cerebrovascular Disease Service at the Massachusetts General Hospital in Boston. He returned to the Medical College of South Carolina July, 1963, as Associate in Neurology and he is now engaged in research in cerebral vascular diseases.

DONALD E. SAUNDERS, JR., M. D.

Dr. Saunders is an honor graduate of the University of South Carolina and Duke University School of Medicine. Internship and medical residency were served at Duke and Johns Hopkins, followed by two years in the USAF. He was awarded a USPHS grant for an additional year of study at the National Heart Hospital in London, following which he returned to Columbia to begin private practice of cardiology and internal medicine. Dr. Saunders is a diplomate of the American Board of Internal Medicine and Associate, American College of Physicians. Currently he is President of the Richland County division of the S. C. Heart Association.

SCIENTIFIC SESSION

Presented by

THE COLLEGE OF MEDICINE, UNIVERSITY OF FLORIDA

THURSDAY, MAY 7

MORNING SESSION

Presiding: Dr. Dale Groom, Chairman, Program Committee.

9:00—Treatment of Rheumatic Fever — Dr. Andrew E. Lorincz

9:45—Break to visit exhibits.

10:00—Panel—Current Management of Peptic Ulcer

Pathophysiology — Dr. Lester R. Dragstedt

Radiology — Dr. O. Frank Agee

Medical and Gastric Cooling — Dr. Jared C. Kniffen

Surgery — Dr. Lester R. Dragstedt

12:00—Lunch

AFTERNOON SESSION

Presiding: Dr. Robert Wilson, President, South Carolina Medical Association.

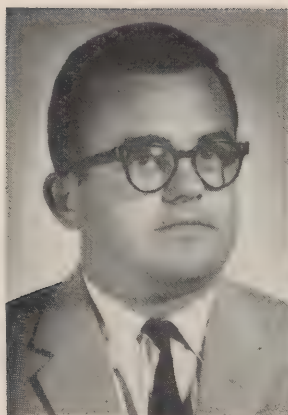
2:15—Office Gynecology — Dr. Hugh M. Hill

2:45—Differential Diagnosis and Management of the Unconscious Patient —
Dr. Melvin Greer

Panel Discussion — Dr. O. Frank Agee, Dr. Jared C. Kniffen

3:45—Break to visit exhibits.

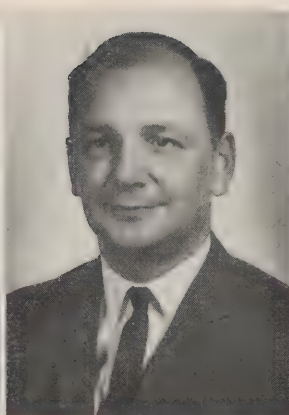
4:00—CLINICAL-PATHOLOGICAL CONFERENCE — Dr. George T. Harrell, Presiding
(Protocol selected by Medical College of South Carolina). Dr. Forde A. McIver, Pathologist



Dr. Kniffen



Dr. Agee



Dr. Lorinz



Dr. Harrell

SPEAKERS

JARED C. KNIFFEN, M. D.

Dr. Jared C. Kniffen holds an A.B. degree from Hobart College and his M.D. from New York Medical College (1958). He took his internship and residency at Bellevue Medical Center, New York University, where he served as chief resident during 1960-61. Dr. Kniffen was a fellow in gastroenterology at Mt Sinai Hospital from 1961-63. He joined the University of Florida medical staff as an instructor in June of 1963.

O. FRANK AGEE, M. D.

O. Frank Agee, M. D. received his B.S. degree from Centenary College of Louisiana and his M.D. from Louisiana State University Medical School in 1958. He served a rotating internship at Confederate Memorial Medical Center, Shreveport, La., where he later became radiology resident. In 1952 he became chief resident and instructor in the Department of Radiology at the University of Florida Hospital where he is now instructor in radiology. Dr. Agee is a diplomate of the American Board of Radiology and Associate Member of the American College of Radiology.

ANDREW E. LORINCZ, M. D.

Dr. Lorincz holds B.S., Ph.B., and M.D. (1952) degrees from the University of Chicago. Internship in pediatrics was served at Bobs Roberts Memorial Hospital, University of Chicago Clinics. Dr. Lorincz was an instructor in pediatrics at the University of Chicago Clinics and the La Rabida Institute of the University of Chicago. He is a diplomate of the American Board of Pediatrics and a fellow of the American Academy of Pediatrics. Dr. Lorincz is also president of the Southern Society for Pediatric Research, a member of Sigma Xi, Society for Pediatric Research, Association of Clinical Scientists, and the American Federation for Clinical Research. In 1959 Dr. Lorincz joined the pediatric faculty of the University of Florida as assistant professor. At present he is associate professor of pediatrics and research associate professor in the department of surgery at the University of Florida.

GEORGE T. HARRELL, M. D.

Dr. Harrell holds the degrees of A.B. and M.D. from Duke University. He was instructor of medicine at Duke before going to Wake Forest College. He rose from director of the department of internal medicine at Bowman Gray School of Medicine to professor of medicine and later research professor. The author and co-author of more than 160 papers published in scientific or professional journals, Dr. Harrell became Dean of the University of Florida College of Medicine and professor of medicine in 1954. He is a member of the executive council of the Association of American Medical Colleges, past president and secretary of the Southern Society for Clinical Research and a member of the Medical Advisory Panel for the Oak Ridge Institute of Nuclear Studies. Editorial boards Dr. Harrell has served on include the *Journal of Clinical Investigation*, *North Carolina Medical Journal* and *Journal of Medical Education*. He is now Dean, professor of medicine and chief of staff at the University of Florida Hospital.

Dr. Harrell is chairman of a joint committee of the American Medical Association and AAMC for teaching hospital design. He is a member of a Veterans Administration advisory council on hospital design.



Dr. Hill

Dr. Dragstedt

Dr. Greer

MELVIN GREER, M. D.

Dr. Greer received his A.B. and M.D. degree from New York University. Internship and residency were served in Children's Medical Service, Bellevue Hospital. Since 1961 Dr. Greer has been on the faculty of the University of Florida College of Medicine. He served as assistant professor of Pediatrics and Medicine (Neurology) and in 1963 became Director of the Birth Defects Clinical Study Center and Chief of the Division of Neurology at the University of Florida. The author of numerous articles, Dr. Greer is a diplomate and fellow of the American Academy of Psychiatry and Neurology, American Academy of Pediatrics, and American Board of Medical Examiners.

HUGH M. HILL, M. D.

Dr. Hill received his B.S. degree from Davidson College and his M.D. from Johns Hopkins University School of Medicine (1952). At Johns Hopkins he moved from intern in gynecology to resident gynecologist and in 1956 became instructor in gynecology. He later served as assistant professor in the Department of Gynecology and Obstetrics at the University of North Carolina. In 1959 he became an assistant professor at the University of Florida College of Medicine. He was appointed associate professor in 1962 and the following year was named assistant dean in charge of student affairs in the College of Medicine.

LESTER R. DRAGSTEDT, M. D., Ph. D.

Dr. Dragstedt's M.D. is from Rush Medical College. His B.S., M.S. and Ph.D. degrees are from the University of Chicago. During 1925-26 he did postgraduate work at the Universities of Vienna and Budapest. He received the Silver Medal of the American Medical Association for original investigation in 1945. The following year he was given the Gold Medal of the Illinois State Medical Society for his original investigation. The American Medical Association in 1963 awarded him its Distinguished Service Award. He received the Samuel D. Gross prize from the Philadelphia Academy of Surgery and has been elected an honorary member of the Swedish Surgical Society and the Argentina Gastroenterological Society. Dr. Dragstedt is former Chairman of the Department of Surgery and now Emeritus Professor of Surgery, University of Chicago School of Medicine. Since 1959 he has been Research Professor of Surgery at the University of Florida.



DR. EDWARD A. ANNIS
BANQUET SPEAKER

In the last few years Dr. Annis has made a remarkable name for himself as a leader, orator, and fiery debater on questions concerning the medical profession, particularly the King-Anderson legislation. So outstanding have his activities been in these matters that he achieved the presidency of the American Medical Association without working through any of the usual lesser positions which are ordinarily supposed to prepare a man for presidential office. He has contributed a tremendous amount to the status of medicine, offering vivid vocal support to the principles which the AMA upholds and creating for himself and for medicine a greatly improved reputation.

Dr. Annis was born in Detroit and is a graduate of the University of Detroit and Marquette Medical School. Going to Florida soon after graduation, he practiced in Tallahassee for a time and then removed to Miami, where he has been most active throughout his life in various worthwhile activities. He has offered sound advice to the governors of the state and to the Junior Chamber of Commerce. He was chairman of the Citizens Committee on Health and has joined in many important efforts.

The Association will have the pleasure of hearing a forceful speaker and a dedicated worker for the good of medicine.

THE WOMAN'S AUXILIARY

A very important part of the gathering in Myrtle Beach in May will be the Convention of the Woman's Auxiliary to the South Carolina Medical Association, held in conjunction with the Association's Annual Meeting. A full and inviting program, both from the standpoint of business and sociability, has been arranged and begins on Tuesday, May 5, at 2:00 P. M.

Mrs. Ralph Parr Baker of Newberry has been an active president in guiding the affairs of the Auxiliary since the last meeting. She reports that there are now nearly 1,000 members in the organization, and that these many medical wives have been very active in promoting the things which are of concern to medicine, both in a professional and personal way. Mrs. Baker says of the doctor's wife that "if she recognizes her obligation to her husband and to his profession, she will realize the value of unity through Auxiliary membership and will endeavor to meet the health needs of the people in her community. Service is the tradition of doctors of medicine and, therefore, becomes our tradition." Mrs. Baker has emphasized the importance of communication in the best interests of medicine, especially mutual understanding and cooperation between the Medical Society and the Auxiliary.

Among the many activities, differing in various parts of the state, there has been emphasis on the Medical Self-Help Program as a part of the Civil Defense effort. Promotion of interest in health careers has been another important activity of the Auxiliary. Health Careers clubs in the high schools of the state have been formed and bring information and interest to the students who might be directed into the none-too-full ranks of health personnel, medical, nursing, or ancillary.

The Mental Health effort has been promoted by the showing of the film, "The Cry for Help," as a training program for police departments and other law enforcement personnel. Supplying medical relief to a worldwide community through International Health Activities has been an active and gratifying effort. Books, drugs, supplies, and equipment are sent to hospitals and clinics in remote areas of the free world. The numerous other activities of the Auxiliary have included "recent projects in the realms of home, traffic, and public safety, including fire prevention, poison control, water safety, GEMS (a baby-sitter training course), use of seat belts, pedestrian safety, assistance with the Polio vaccine program, and others."

Auxiliary members have assisted materially in promoting "Operation Hometown" and have affiliated themselves with SCALPEL. The importance of this feminine influence in these matters cannot be overestimated. Many other projects have been endorsed and assisted by the Auxiliary, such as the AMA program on Medicine and Religion, the AMA-ERF activity, promotion of rural health, and material contributions to the Benevolence Fund and the Student Loan Fund. Promotion of the morale-building Doctor's Day for medical husbands has been a worthwhile contribution.

The Auxiliary is a vital and valuable part of the South Carolina Medical Association. Its excellent leadership has carried it on to many substantial accomplishments.

JIW



Mrs. Ralph Baker

Clinico-Pathological Conference

MAY 7, 1964

4:00 P. M.

A CASE OF PROGRESSIVE PULMONARY DISEASE

Chief Complaint: Fever and shortness of breath.

HPI: This 67-year-old W/F was admitted for the first time to the Medical College Hospital on 3 December 1960 with the history of having had a "heart attack" six months previously for which she was hospitalized elsewhere. Convalescence from what was diagnosed as an anterior myocardial infarction proceeded without complication but the patient did not "do well" during the summer. Beginning about 6 weeks prior to admission the patient experienced a sudden chill which was followed by an intermittent fever for which she was again admitted to a local hospital. During that hospitalization diagnostic studies were undertaken, including blood cultures, which were negative. At about the time when diagnostic studies had been completed and a course of antibiotic therapy was planned, the fever subsided and the patient was discharged from the hospital without specific therapy. Chest x-ray films taken during that admission showed pulmonary congestion and a persistence of pulmonary fibrosis (secondary to previous irradiation) on the left side. In addition there was reported a patchy density in both lungs which was more marked on the right side. That picture was interpreted as evidence of cardiovascular disease with pulmonary congestion and superimposed pneumonitis, particularly on the right. In the interim between that hospitalization and the present admission the patient states that she has continued to run a fluctuating temperature curve with 1 to 2 degree temperature elevation in the mornings and 2 to 3 degree elevation in the afternoons. The patient has also experienced weakness, anorexia and shortness of breath on exertion. She says that her lungs have felt "congested" but that she has not had a cough. At present she complains of dryness in the mouth and throat. There has been no chest pain but she has a feeling of "heaviness" in her chest.

Family History: The maternal grandmother died of carcinoma of the breast. One uncle and one brother have diabetes. The patient's mother died of "kidney disease." There is no history of contact with tuberculosis. The patient's husband and two children are living and well.

Previous Medical History: The patient has had the usual childhood diseases as well as scarlet fever, influenza and typhoid fever without complications. A mastectomy was performed in 1943 for carcinoma of the left breast and post-operative x-ray therapy was given. The patient has been followed since that time with periodic x-ray and physical examinations which have revealed no evidence of recurrence. Left sided

pulmonary fibrosis has been described since 1959 (January) and has been attributed to previous irradiation therapy. The patient has been a known diabetic for 14 years and is said to have been well controlled with 52 units of Lente insulin daily. There is no history of asthma, eczema or hayfever.

Review of Symptoms: **HEENT:** The patient complains of occasional sore throats associated with upper respiratory infections. She has had some pain in her ears for the past 3 or 4 months.

Cardio-Respiratory: The patient is said to have had hypertension for the past three years.

Gastro-Intestinal: There is no history of melena or bloody stools. The patient states that she has had some abdominal discomfort and epigastric soreness for several weeks.

Genito-Urinary: There is no history of polyuria, hematuria or dysuria. The patient states that she has occasional nocturia.

Physical Examinations: Vital signs: T.100. P.92. R.20. B.P. 120/70.

Aspect: This is a well developed, well nourished, white female in no acute distress. Physical examination negative except as noted.

Eyes: Fundi show AV nicking with slight arteriolar narrowing.

The left breast has been surgically removed. There are no masses palpable in the right breast. The chest is slightly hyperresonant. There is a slight increase in the anteroposterior diameter with fine crackling rales heard in both lung bases. The PMI is located at the midclavicular line. There is sinus tachycardia with the pulmonic second sound reported as equal to the aortic second by one examiner but as louder than the aortic second sound by two examiners. A high pitched well localized grade II apical systolic murmur is noted. There is a slight splitting of the first sound in the apical region but no gallop. Good superficial peripheral pulses are present bilaterally.

There is a marked kyphoscoliosis to the left in the mid-thoracic region. No other significant findings noted. Neurological findings are grossly negative.

Laboratory Findings: (For some additional details see hospital course)

Blood: Hbg 10.4 Gm.; RBC 3.89 mils.; WBC 20,000, polys 73%, lymphs 23%, monos 3%, eosinophiles 1%, BUN 18 mg/100 ml; total proteins 6.39 Gm., albumin 2.76, alpha glob. 0.97, beta glob. 0.92, gamma glob. 1.74; alkaline phos. 11.0 (KAU); blood culture, gram positive bacilli, unable to isolate "probable contaminant." 4 December negative.

Urine: Yellow, acid, specific gravity 1.021, albumin

1+, sugar 1+, acetone 0, WBC per HPF 10-12, RBC per HPF 0. Epith. cells 3+, casts 0, crystals 1+, culture *E. coli* 100%, under 300 bacterial cells per ml.

Feces: 5 Dec. Occult blood, parasites and ova negative. 9 December occult blood 3+.

Course in Hospital: 4 Dec. Murmurs much more impressive. Very loud precordial systolic murmur, high pitched and longer lasting than on admission.

5 Dec. Referring physician attached note showing office laboratory studies which included persistent leukocytosis and the appearance on several occasions of pyuria, bacilluria, pus casts and glitter cells.

PA and lateral chest films show streaky and nodular increased densities of "fluffy" character in both lung fields, more marked on the right. There is hilar and right paratracheal lymph node enlargement.

Cholecystogram. Telepaque failed to show a definite gallbladder shadow.

6 Dec. Gastric washings for acid fast bacilli requested and 15-20 ml bloody fluid obtained. Attending notes as follows: "Plan now is to push digitalis and mercurials for a few days and re-check films. Patient is already on penicillin and may be a little better."

7 Dec. Looks better, less dyspneic. Cardiac rhythm entirely regular, rate 98. Murmurs not quite as loud.

8 Dec. Patient dyspneic and coughing with any exertion. Moist crepitant rales at both bases more pronounced.

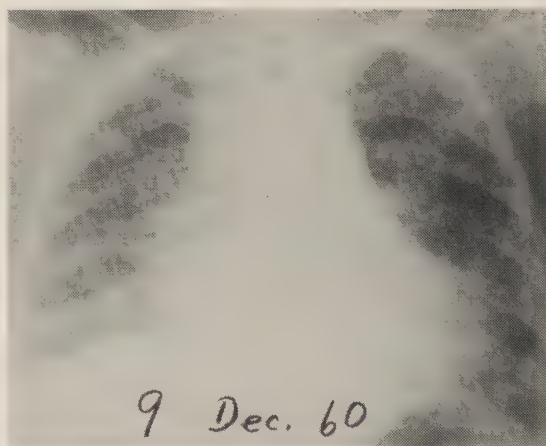
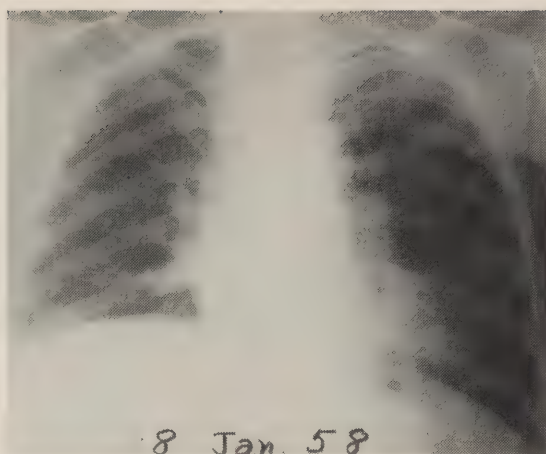
9 Dec. Chest x-ray film reported: "PA and lateral films of the chest show the fluffy streaky and nodular densities in the lung fields, particularly in the right lung field along with right hilar and paratracheal nodes. There has been no improvement."

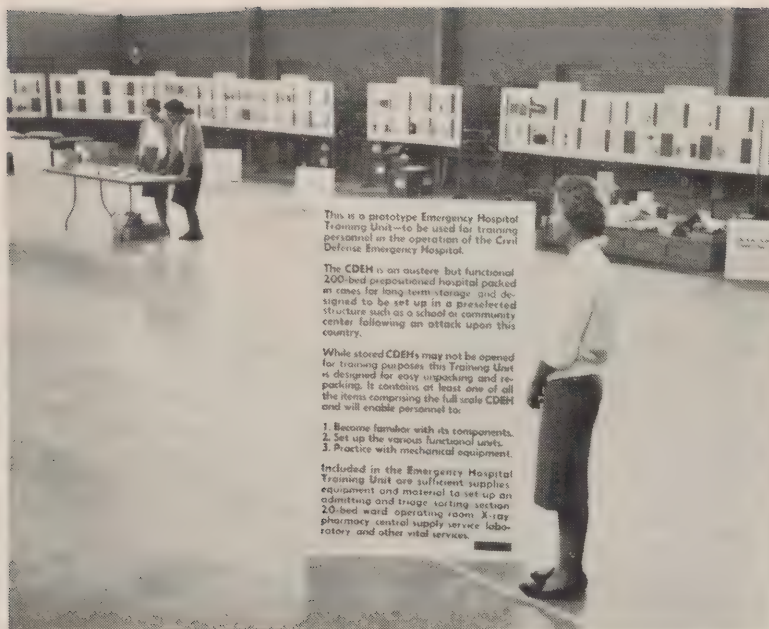
10 Dec. Has shown good temperature response to penicillin and subjectively feels better. An upper G.I. x-ray study showed a small sliding hiatus hernia, otherwise negative.

12 Dec. Is having severe left chest pain with tenderness along left anterior chest wall. Has not had relief from Darvon or codeine. No dyspnea. Regular rhythm. Pain is described as different from previous cardiac pain. Sputum reported negative for malignant cells.

13 Dec. More cyanotic tonight. Bone marrow aspirate negative for malignant cells.

15 Dec. Patient has grown rapidly worse during past 48 hours. Extremely dyspneic even with oxygen continuously. Tubular breath sounds throughout both lung fields. Dry crackling rales scattered throughout lower lung fields. Medication changed to Chloromycetin and streptomycin. Patient died quietly of progressive respiratory failure at 9:10 a. m.





The Emergency Hospital

WHAT IS IT?

The Civil Defense Emergency Hospital (CDEH) is a functional and relatively complete 200-bed general hospital, requiring a staff of: 18 Physicians, 3 Administrators, 33 Nurses, 5 Anesthetists, 2 Pharmacists and 118 Trained Aides.

It is designed to function within an existing structure such as a school building, community center, or church building which has been pre-selected by competent local authorities. The hospital is organized to function preferably in conjunction with existing hospitals, but capable of being operated independently.

WHY HAVE IT?

It is estimated that 80% of the 1,500,000 hospital beds available in the United States would be destroyed or made unusable as a result of a mass attack. CDEH units today could provide approximately one-half of the total available hospital beds in the event of such an attack. The primary mission of the CDEH is to team up with any existing hospitals which have survived the disaster to become the core of the post-attack hospital system which is essential to providing medical care for the surviving population.

WHAT DOES A CDEH INCLUDE?

The Emergency Hospital is divided into eight basic functional sections, including: a laboratory capable of performing 25 routine standard clinical tests; a pharmacy containing antibiotics, heart and respiratory stimulants, intravenous solutions and other drugs; a quick-reading X-ray unit; operating room equipment containing five operating tables, three operating lamps, three anesthesia apparatus and expendable surgical and medical supplies to operate for 30-days (1962 Model).

Each hospital also has a 15 KW generator to provide auxiliary power if the local electrical supply is disrupted, and a 1500 gallon water tank and pumping unit for emergency water supply.

HOW IT IS STORED?

The 1962 model Emergency Hospital is packed in approximately 730 crates. It weighs a total of 50,000 pounds and requires 7,300 cubic feet of storage space.

It is possible to erect the entire hospital with 120 man-hours of labor, in a floor area of 15,000 square feet.

WHERE ARE CURRENT UNITS STORED?

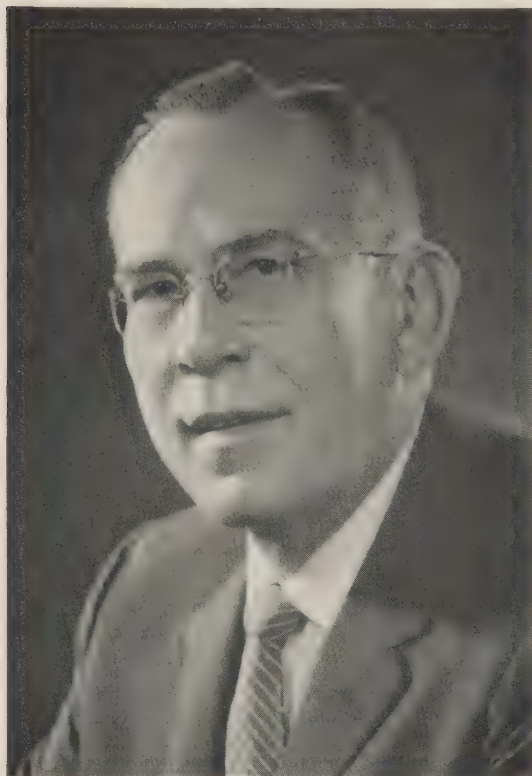
Anderson, Barnwell, Berkeley, Colleton, Darlington, Dillon, Dorchester, Fairfield, Florence, Greenwood, Horry, Kershaw, Lancaster, Laurens, Marlboro, Newberry, Oconee, Richland, Saluda, Spartanburg, Sumter, Williamsburg and York Counties.

Emergency Hospital Demonstration

The Emergency Medical Care Committee, in conjunction with the State Board of Health and the S. C. Civil Defense Agency, has made arrangements to set up a complete field hospital similar to the Civil Defense Emergency Hospitals pre-positioned throughout the State.

This exhibit will be set up under tentage and will be adjacent to the Ocean Forest Hotel. There will also be vital information concerning all the facets of the Civil Defense program in South Carolina, including the program for Medical Self Help, Fall-Out information, as well as other vital pamphlets.

Committee Reports



Dr. Robert Wilson

Scientific Program Committee

The Scientific Program Committee has completed its arrangements for the 1964 convention to be held at Myrtle Beach, May 5, 6, and 7. A copy of the completed program together with pictures and biographies of speakers, several case reports and the protocol for the Clinical Pathological Conference has already been submitted for publication in the *Journal* and in the convention program.

Following the precedent of the last several years, the Committee decided again this year to invite the faculty of one of our neighboring medical schools to appear as our guest speakers for the Thursday morning and afternoon scientific sessions. The new University of Florida College of Medicine was selected and, after receiving an acceptance from their Dean, George T. Harrell, M. D., the Chairman went to Gainesville and met with Dean Harrell and eight members of his faculty to map out the outline of their program. Particularly impressive to this Committee has been the cooperation and alacrity with which Dean Harrell and his staff have participated with us and we look forward to two outstanding sessions on Thursday built in large part around audience participation. Advance publication of cases to be discussed not only provides a clinical frame-

work but also it is hoped that interest in the program will be stimulated thereby.

The Wednesday afternoon session is traditionally one for local participation. An invitation for submission of abstracts was published in the *Journal* well in advance but evoked little response. Several of our younger members were individually approached for contributions to the program. Also the South Carolina Heart Association was again invited to sponsor a guest speaker and Dr. J. Lawton Smith, a native South Carolinian now on the faculty of the University of Miami, was selected.

At one of the several meetings of this Committee there was considerable discussion of the inadequacies of the facilities at the Ocean Forest Hotel in Myrtle Beach — particularly the lack of conference rooms, lack of suitable space for scientific exhibits or films, the small meeting room which becomes quite noisy from the adjacent exhibit area, as well as the repeatedly voiced complaints about service and accommodations. The Committee feels that these important factors should be weighed in the decision as to a site for the next convention.

The present system of rotation of members whereby one has two years experience on the Committee before becoming Chairman should be continued.

Dale Groom, M. D., Chairman

Committee on Legislation and Public Relations

A meeting was held in the Columbia Hotel, November 21, 1963. Members present were Drs. Harold S. Pettit, Hugh H. Wells, and Donald G. Kilgore, Jr., Chairman. Ex-officio members present were Dr. Robert Wilson of Charleston, President, and Dr. Frank C. Owens of Columbia, President-Elect; Mr. M. L. Meadors, Executive Secretary and Counsel of the South Carolina Medical Association was also present. Not present were Dr. C. Tucker Weston, Dr. J. D. Gilland, Dr. Henry L. Laffitte and ex-officio member Dr. Ben N. Miller.

A Good Samaritan Act for South Carolina was discussed. The House of Delegates had recommended that this Committee study the feasibility of such a law and introduce a bill if it saw fit to do so. One member of the Committee was opposed because he felt that such a law would not give physicians any protection that they did not now enjoy. However, the majority of the Committee felt that such a law could be useful. It was pointed out that in one local community the medical profession had received a considerable amount of unfavorable radio and television publicity after a physician had refused to render emergency care to a patient injured in an automobile accident near his office. The Committee recommended that Mr. Meadors draw up a model bill, check informally with the Attorney General on

its authority and validity, and send it to the members of the Committee for their consideration before the next meeting in January, 1964. Before the next meeting the Chairman was to check with the American Medical Association to see if such a law had ever been challenged or if a situation has ever arisen where a physician has been successfully sued for malpractice while rendering aid to an accident victim.

The next item of business was a recommendation by the Accident Prevention Committee which was approved by the House of Delegates at the annual meeting. This is a proposed law to prohibit the sale of nonmagnetic BB pellets in the state. The Committee recommended that a model bill be drawn up by Mr. Meadors after checking with the AMA on the content of similar laws in other states and that it be re-examined by the Committee at its January meeting.

Acting on another recommendation of the Accident Prevention Committee, a bill requiring driver re-examination was to be introduced in the legislature next year by Representative Joseph H. McGee, whom President Wilson knows quite well. Dr. Wells of Seneca volunteered to get a copy of Senator Marshall Parker's bill and send it to Mr. Meadors for circulation to the membership. Mr. Meadors is to check with the South Carolina Law Enforcement Division to see if such a bill would be satisfactory to them since they would have the primary responsibility for enforcing it. It was suggested that the South Carolina Medical Association, with the cooperation of the Medical Auxiliary, promote actively the passage of such a law because of the determined opposition which killed it last year.

The next proposal concerned the passage of a law requiring all automobiles sold after January 1, 1965, to be equipped with seat belts. This was approved by the Committee, and President Wilson will ask Representative McGee of Charleston to introduce such a bill in Legislature in the next session.

Dr. John F. Ott, Chairman of the Committee of Infant and Child Health, asked the committee to recommend the approval by the House of Delegates to introduce an act for the mandatory reporting by physicians and institutions of certain physical abuse of children. Dr. Ott's Committee had approved of the model act listed in *Pediatrics* 31:898 (June, 1963). In addition to the act reported here, Dr. Ott's Committee recommended the incorporation of a provision for the reporting of willful or non-willful starvation of children as well as physical abuse. The recommendations of the Committee on Infant and Child Health were approved, and it was recommended that a law covering such a situation be approved by the House of Delegates at the next meeting.

The next item of business was a discussion of a law authorizing performance by physicians and surgeons of sterilization operations provided permission be given in writing by the involved person and his



Dr. Dale Groom

or her spouse after a waiting period of thirty days. Such a law would also permit the performance of vasectomy or salpingectomy on any unmarried person under the age of 21 when so requested in writing by such a minor providing that the Circuit Court of the County or the Corporation Court of the City in which such a minor resides on a recommendation of the parents or guardian of a child shall determine if the operation is in the best interest of such a minor and give a court order authorizing such a physician or surgeon to perform such an operation. Subject to the rules of law applicable to negligence, no physician or surgeon licensed by the State would be held liable for having performed a vasectomy or salpingectomy authorized by the provisions of the act. The Committee recommended that the House of Delegates approve the introduction of such a bill into the Legislature at their next annual meeting.

Dr. Wilson recommended that all prescriptions for toxic drugs bear the generic name of these drugs for use in case of accidental or suicidal ingestion. The Committee recommended asking the House of Delegates to approve the introduction of such a bill. It was also recommended that the committee members contact the representatives of their local pharmaceutical associations to determine how such a law should be worded in order to be practical.

A second meeting was held in the Columbia Hotel on January 13, 1964. Members present were Dr. Harold S. Pettit, Dr. Donald G. Kilgore, Jr., Chairman, and ex-officio members Dr. Robert Wilson and Dr. Frank C. Owens. Mr. Meadors, Executive Secretary and Counsel of the South Carolina Medical Association was also present. Not present were Drs. Gilland, Laffitte, Wells, Tucker Weston and ex-officio member Dr. Ben N. Miller.

At the request of the Committee Mr. Meadors had drawn up a sample bill on a Good Samaritan Act for the study of the Committee. The Committee approved the introduction of this bill into the legislature. The Chairman of the Committee agreed to see that this bill was introduced.

The next item of business was a discussion of a bill prohibiting the sale of non-magnetic BB pellets in the state. Several members pointed out that non-magnetic BB pellets had not been manufactured in this country since 1929 and that none of the ophthalmologists with whom they had checked were pressing for such a law. Mr. Meadors had drawn up a sample bill. However, it was felt by the Committee that such a law would not be really necessary. President Wilson stated that he would check with the Accident Prevention Committee under the leadership of Dr. Henry W. Moore to ascertain if they still wish such a bill to be introduced in view of these facts.

The third item on the agenda was the Driver Registration Act. President Wilson stated that Senator Parker's bill was still pending in the Senate. He felt that we should try to activate this bill rather than introduce another such bill this year. He also mentioned that the Charleston newspapers had given favorable publicity to the doctors backing a bill providing for mandatory seat belts in all South Carolina automobiles after January 1, 1965.

Donald G. Kilgore, Jr., M. D., Chairman

Emergency Medical Care

The following is our Committee report which was approved by the entire Committee.

There was no old business for discussion since the Civil Defense Plan is now complete and in the hands of the Governor for approval. This plan pinpoints the responsibilities of each agency and division within the State Government and it is expected an executive order will be issued in the near future to assure compliance with the plan.

Our business was primarily that of discussions rather than motions.

The medical requirements for such a plan were discussed covering aspects of pre-attack and post-attack phases of possible enemy action, as well as courses of action to be followed in domestic emergencies.

It is recognized that this Committee is a direct means of making, studying, or forwarding all recommendations which would further the Emergency Health Service of the State. Mr. Bushouse stated that plans for the utilization of the prototype training unit of the CDEH called for setting up this unit in 3 central locations for a one week period each, in which 12 counties would be afforded the opportunity of seeing the complete unit.

The Medical Self-Help Training Program was discussed and its program in the past year has been less than expected. The possibility of entering this program into the 11th and 12th grades of the State School System will be exploited.

The Whole Blood Program was discussed, especially pointing out that the American National Red Cross in the state is having difficulty obtaining donors. This is generally true throughout the state except for areas in which military forces are located or large medical centers.

A discussion led by Dr. Guyton, on the current Immunization Program was held. At present, attempts are being made to have physicians support this program for immunizing the entire populace of the state. No action was taken and further discussion will be held at the next Committee meeting.

The chemical and biological warfare aspects of enemy attack are far more real than realized and perhaps a greater hazard with the health of the nation than fallout.

Notification was given current and future courses in chemical and biological warfare at Ft. McClellan, Alabama. Notice has gone out through national and local journals indicating the availability of such courses and enjoining affected personnel, especially doctors, to take advantage of these week-long courses.

The State Line Training Course has been set up and scheduled to be held at the Veteran's Hospital, Columbia, on June 9th and 10th. This program was originally suggested at the 1961 meeting of this Committee and wide publicity will be given this meeting. This course will be most beneficial in furthering and strengthening Health Mobilization preparedness and planning.

Robert S. Solomon, M. D., Chairman

Committee on Infant and Child Health

This committee felt that something should be accomplished on a state wide basis to protect the "Battered Child." All members of the committee were provided with copies of *The Abused Child Commentary*; *The Physically Abused Child*; and a bibliography on the Battered Child; including copies of a "model act" for the mandatory reporting by physicians and institutions of certain physical abuse of children as formulated by the Children's Bureau of H. E. W. for their study and suggestions.

Dr. William J. Brannen, Jr. of Simpsonville, Dr. Casper E. Wiggins of Greenwood, Dr. Julian A. Salley of Columbia, Dr. Jack W. Rhodes of Charleston, Dr. Girard C. Rippey, Jr. of Anderson and Dr. Hilla Sheriff of Columbia, after careful consideration of the subject, all indicated that this problem was of sufficient merit to warrant that we obtain a suitably worded version of this "model act" to fit our needs in South Carolina. Various members of the committee indicated that the "model act" should be so worded as to incorporate a provision for the reporting of willful or non-willful starvation of children as well as physical abuse.

The chairman of the Committee on Infant and Child Health requested the Committee on Legislation and Public Relations of the South Carolina Medical Association through its chairman, Dr. Donald G. Kilgore, Jr. of Greenville, to consider and to

recommend the approval by the House of Delegates of the South Carolina Medical Association to introduce an act for the mandatory reporting by physicians and institutions of certain physical abuse of children a la the "model act" listed on page 898 of *Pediatrics*, volume 31, June, 1963. In addition to the act reported in *Pediatrics*, the Infant and Child Health Committee recommended the incorporation of a provision for the reporting of willful or non-willful starvation of children as well as physical abuse.

The recommendations of the Committee on Infant and Child Health were approved by the Committee on Legislation and Public Relations and it was recommended by the latter committee that a law covering such situations be approved by the House of Delegates of the South Carolina Medical Association at the next meeting of the Association to be held at Myrtle Beach in May 1964.

John F. Ott, M. D., Chairman

The Committee To Study Health Organizations Seeking Endorsement by the State Medical Association

Our committee voted to endorse Medic-Alert.

Some of the committee, though reluctant to give a blanket endorsement of the National Foundation, still feel that we should express a willingness to advise the Foundation and help direct its activities in the state. So far as we know, neither the AMA nor any state associations have given a blanket endorsement to the Foundation.

Respectfully submitted,
Clay W. Evatt, Chairman

Committee on Allied Professions

It is the personal opinion of the chairman, after holding conferences with the local Bar Association, local Ministerial Association and President of the South Carolina Nurses Association, that it would not be to the best interest of the South Carolina Medical Association to instigate the program at this time.

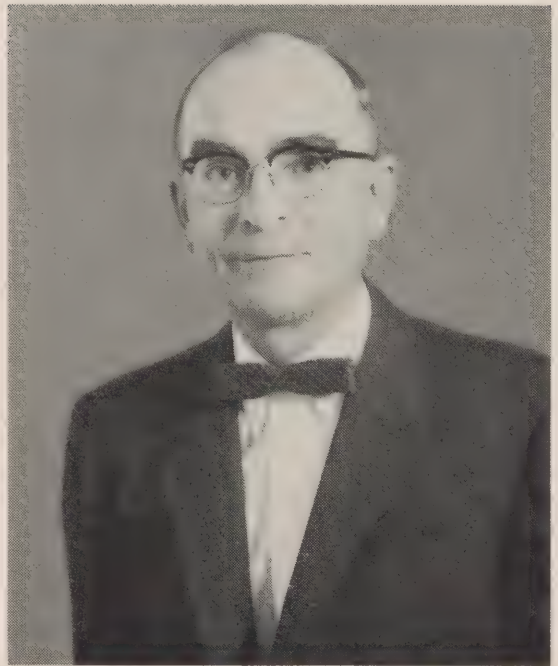
Keith F. Sanders, M. D.

Special Committee Concerning the Relationship of the South Carolina Medical Association to the Medical College of South Carolina

This is a continuation of a special committee appointed in August 1962 to "study and report to Council the advisability of a permanent committee to study medical education and all State agencies having medical advisory committees."

The House of Delegates, meeting in May 1963, established a permanent committee on Post-Graduate Medical Education, and a committee regarding State agencies having Medical Advisory Committees and organizations seeking approval of the South Carolina Medical Association.

The question of the relationship of the S.C.M.A. to the Medical College of South Carolina was left



Dr. A. C. Bozard

unanswered and was referred back to this committee for further consideration and recommendation to the House of Delegates at the annual meeting in May 1964.

At a meeting held in Charleston, S. C., on November 8, 1963, the following members being present: Dr. Charles B. Hanna, Dr. O. B. Mayer, Dr. William O. Whetsell and Dr. Martin M. Teague, Chairman, the committee first expressed its sorrow in the untimely death of one of its members, Dr. Henry F. Ross.

After careful consideration this committee concluded unanimously that a permanent committee of the South Carolina Medical Association, concerned with undergraduate education at the Medical College of South Carolina, would not serve a useful purpose and is not recommended.

Martin M. Teague, M. D., Chairman

Advisory Committee to the Crippled Children's Society of South Carolina

This committee met at the time of the last Annual Meeting and has had no occasion for further sessions. It will hold a meeting at the time of the 1964 Convention at Myrtle Beach.

This committee functions in an advisory way to the Crippled Children's Society. Over the past year the chairman has had frequent conferences with the executive secretary of that society. No special action has been asked of the Association.

The committee is of the opinion that the Society does an excellent work and suggests that this committee be continued.

J. I. Waring, M. D., Chairman

Committee on Historical Medicine

During the several years past the chief activity of this committee has been the compilation and publication of a history of medicine in South Carolina. The first phase of this publication has been achieved and by the time of the Annual Meeting, the first volume, "A History of Medicine in South Carolina, 1670-1825," will probably have been distributed to the membership. Members have been informed on a number of occasions that only those who requested the book would receive it and on account of limitation of the number of copies printed and the matter of expense, it was planned that no free copies would be distributed unless application had been received by March 20, 1964 and that thereafter the book could be obtained only by purchase. This is important in the matter of meeting expenses.

The committee has turned now to the compilation of a second volume carrying the story of medicine in the state on from 1825. This is in the process of research and will require some little time before its appearance.

For some years the Association has set aside the sum of \$500 annually to be applied to the production of these books. Your committee respectfully requests that this appropriation be made available again this year.

J. I. Waring, M. D., Chairman

AMA—ERF Committee

During the period from June 1963 through December 31, 1963 contributions were received in the amount of \$18,418.35. Donations were received from the following sources:

Physicians	\$15,459.50
Women's Auxiliaries	458.85
Alumni Office, Medical College of S. C.	2,500.00

In December 1963 personal letters were sent to the president of the Woman's Auxiliary of the South Carolina Medical Association as well as to the presidents of each county and district auxiliary in the state expressing appreciation and thanks for the fine effort they put forth in securing donations from physicians for AMA-ERF. It is expected that the reports in the remaining months of this year to June 1964 will reflect the excellent job done by these ladies.

A final report will be submitted to the president of the South Carolina Medical Society at the conclusion of this fiscal year.

Joel W. Wyman, M. D., Chairman

Coroner - Medical Examiner Systems Committee

Over the past several years, this committee has recommended significant changes in the investigation of medical legal deaths. It has proposed that a central laboratory for medical legal investigations be established to serve the needs of the state preferably

under the jurisdiction of a qualified medical examiner and acting under an independent board appointed by the Governor. This central laboratory would be staffed by competent scientists and would be available to official agencies within the state. The committee has further recommended that the office of State Medical Examiner be set up and that this position be filled by a qualified forensic pathologist who would be available for consultation in all medical-legal investigations within the state. He would serve as Director of the Medical-Legal laboratory and he would be empowered to appoint local medical examiners throughout the state.

The committee has been particularly impressed by a similar law in Georgia which has set up a medical-legal laboratory with trained director and a medical examiner system superimposed upon the traditional coroner system and yet without displacing the coroner as a political entity.

During the year a meeting was held with the Honorable Daniel McLeod in reference to the writing of such legislation for South Carolina. Due to the pressure of work in the Attorney General's office, this bill was not written in time for introduction at the 1964 session of the legislature. It is now planned to have an interested State Senator work with the Legislative Council in drawing up this legislation.

In the consideration of this model bill, it is planned to follow substantially the Georgia act. The cost of a central facility for a medical examiner's office and laboratory is now set at about \$180,000 with a yearly budget for salaries, supplies and equipment at about \$55,000 to \$60,000 yearly. Supplementary medical examiners over the state would probably require local legislation to provide for the expenses of the medical examiner. It is anticipated that these examiners would be compensated locally, but at a fee scale commensurate with the work involved.

During the past year there have been contacts with the State Bar Association and a Committee of the South Carolina Bar Association has been set up to work with this committee in reviewing and promoting the passage of this important legislation.

E. Arthur Dreskin, M. D., Chairman

Committee on Fee Schedule

We have no report at this time. The old committee has been resolved and a new committee appointed.

W. W. Edwards, M. D., Chairman

Committee on Cancer

No problems were brought before this committee and there was no obvious need for it to function.

Edward E. McKee, M. D., Chairman

Accident Prevention Committee

The Accident Prevention Committee met January 12, 1964, with the following members present: Drs. Reid, Wiggins, Mayer, and Moore. Dr. Robert Wilson, State Association President, also attended.

Highway Safety

The committee decided that a recommendation supporting highway safety measures such as seat belts, periodic motor vehicle inspection, and periodic driver re-examination should be prepared by the Chairman and sent to the appropriate state legislative committee. These recommendations were made in a letter to the Honorable Harold Breazeale, Chairman of the Education and Public Works Committee. In addition, the Accident Prevention Chairman appeared personally before the committee-hearing to recommend passage of House Bill H2094 (periodic motor vehicle inspection). House Bill H2048 (requiring seat belts) appeared to meet no opposition at the hearing. However, Senate opposition appears to be quite heated from the Senator from Marion County; and at the present time grave doubt exists as to the passage of any highway safety measures during the current session of the legislature.

Labeling of Toxic Prescriptions

The committee considered the need for the labeling of toxic prescription drugs with either the toxic ingredients or generic names. All agreed in principle that such labeling was highly desirable. However, much study and work—beyond the scope of the committee—will have to be expended before a workable law is drafted. The chairman reported on communications from AMA which gave little information or aid on the subject matter. According to the AMA no state has any similar law at present.

Poison Prevention

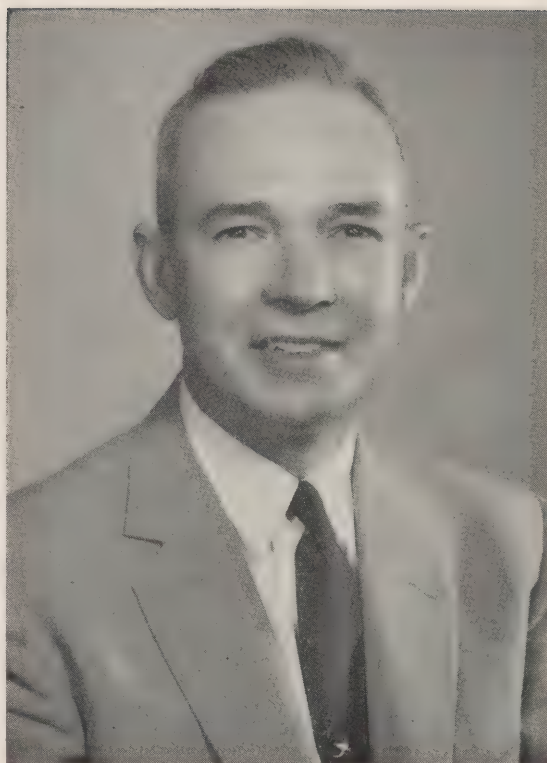
On November 7th and 8th Dr. Margaret Jenkins and this committee chairman participated in a TV program on Accidental Poisoning. It was produced for medical and lay audiences by the S. C. Educational Television Network in conjunction with the Division of Postgraduate Education of the Medical College of South Carolina. The film, shown on commercial TV in several of our larger cities, has been well received.

In conjunction with the State Chapter of the American Academy of Pediatrics, the State Board of Health, and the S. C. Pharmaceutical Association, plans have been made to have a statewide educational program during National Poison Control Week, March 16-23. Leaflets and questionnaires concerning poisons and toxic hazards encountered in the home will be distributed by the grammar schools to approximately 200,000 children throughout the state. Poison control will be the subject of television programs and news stories. The pharmacists of the state are actively and enthusiastically assisting in this program to inform the public.

Respectfully submitted,
H. W. Moore, M. D., Chairman

Special Study Committee To Communicate With S. C. Insurance Underwriters Association

The Special Study Committee to Communicate



Dr. Ben Miller

with S. C. Insurance Underwriters Association met with the Health Insurance Council of S. C. at a joint meeting November 21, 1963 in the Carolina Room of Liberty Life Insurance Company of Greenville, S. C. The Chairman and Dr. Furman Wallace of Spartanburg represented the Committee. Mr. George Hipp, Chairman of the Health Insurance Council of S. C., and Dr. W. B. Mills, Medical Director of Liberty Life Insurance Co., Chairman of the Health Insurance Medical Relations Committee, were present for the Insurance Council. A special guest was Mr. Benjamin Kendrick of New York City, Staff Coordinator for South Carolina, North Carolina, and Virginia, for the Health Insurance Council.

Mr. Kendrick stated that such liaison committees were taking place in many states throughout the country with definite benefit to the physicians, the insurance industry, and principally, to the benefit of the insured.

The Committee decided the following:

(1) To send out a letter to each doctor in South Carolina and ask for questions or suggestions. This has been done and many replies have been received which will be studied at the next meeting.

(2) Many replies and suggestions had already come in asking for a simplified blank. The Committee has arranged for an exhibit at the annual Medical Association Meeting in May of 1964. The exhibit will have all types of forms and pamphlets.

(3) The Health Insurance Council agreed to sup-

ply speakers to meet with County Medical Associations at any time.

(4) The Committee agreed to prepare some waiting room pamphlets to supply doctors of South Carolina explaining the use of insurance.

(5) The Committee agreed that several articles should appear in the S. C. Medical Journal explaining simplified blanks and other problems related to insurance.

The Committee recommends for the average doctor the use of Health Insurance COMB 1. A blank is available through the Committee upon request. The blank is now in the process of being revised by a committee from the AMA and the Health Insurance Council. Copies will be at the state medical meeting and will appear in the state Journal.

Wm. T. Hendrix, M. D., Chairman

Committee on State-Wide Polio Immunization Program

At its annual session in 1963, the House of Delegates of the South Carolina Medical Association passed the following resolution: It is recommended that the President of the South Carolina Medical Association appoint a special committee to initiate a statewide immunization program against poliomyelitis, and that this committee secure the cooperation and endorsement of each county medical society. The facilities of the State Health Department and its county units should be utilized in the program and appropriate medical records be kept. The committee feels that a unified effort with the endorsement of the Governor of South Carolina and the Legislature would provide maximum public response as well as improved medical public relations.

The committee, composed of Drs. J. W. Bell, W. M. Hart, J. R. Harvin, M. Q. Jenkins, P. K. McNair, W. B. Mills, and C. C. Lyles, Chairman, sent questionnaires to each county medical society and ascertained the following: (1) The counties of Bamberg, Barnwell, Beaufort, Berkeley, Charleston, Chester, Colleton, Dorchester, Hampton, Jasper, Newberry, and Orangeburg had started or already completed an Oral Polio Program. (2) Georgetown County had had a Program in the Fall of 1962, but elected to have another. (3) The remaining thirty-four counties were overwhelmingly behind the State-wide Plan.

Each county or group of counties made its own plans and arrangements. In most cases the program was a joint sponsorship of the local Medical Society and a civic club. It was the responsibility of the individual unit to secure its vaccine from one of the drug companies. In the case of South Carolina, Pfizer Laboratories and Wyeth Laboratories supplied the vaccine. Without the extensive and intensive assistance of the representatives of these firms the programs would have had a very limited success.

The experience gained from these programs points up the extreme difficulties to be overcome in any

mass immunization project. Motivation of large segments of population depends upon repetition of the intended goal or upon some focussing dramatic event. It is to be feared that mass immunization for other more prevalent diseases of equal or greater severity would fail miserably due to their low publicity and impact value.

Clarence C. Lyles, M. D., Chairman

A record of immunizations by counties will be published in the May Journal.

Mediation Committee

I am happy to report that during this year only two cases have been referred to the Mediation Committee. One case has been investigated and disposed of. The other is in the process of investigation. Both cases were the result of misunderstanding and lack of communication between the parties involved.

S. O. Cantey, Jr., M. D., Chairman

Medical Advisory Committee To Selective Service

During 1963 there were 77 new interns registered under the Selective Service. Nineteen were called up for physical exam by Selective Service. Approximately 52 were not called for examination because they were already in the reserve. Five or six were not called for examination because they were born before 1932. All 19 were found to be physically qualified. Eleven were ordered for induction. All obtained commissions and none was drafted. Ten of these Doctors are on active duty as of February 17, 1963 and nine are commissioned and not on active duty.

In 1964, ninety-five physician interns were reported to Selective Service. Forty of these are either over age (born prior to 1932) or already had commissions. Fifty-five were called for physical exam. One man was disqualified on account of his physical condition and four as of this date have not completed their physicals. Fifty were reported qualified.

Selective Service called upon your committee to render an opinion as to availability of six men during the past year. The regional committeeman concerned was consulted and a study made of each case. An opinion of "Available" was rendered in each case.

Selective Service on March 6, 1964 issued a call for 1175 physicians over the nation. The allotment as to service is as follows: Army—650, Navy—325, Air Force—200. Date for reporting for duty is July 1, 1964. The quota for South Carolina will be 15 doctors. These will be taken from those finishing their internship. The priority of call will be:

1. Those from 19 to 26 years of age who are not married
 2. Those from 19 to 26 who are married then, those over 26; the youngest first.
- Commissions will be appointed prior to date of induction.

Although there is no "convenient" time for a doctor to enter service, it has been determined by

Selective Service that the least inconvenient time is at the completion of the internship, and before entering a residency or private practice. The forthcoming call can be expected to fill its quota from those men finishing their internship this year. We are also given to understand that should a man receive a call before he completes his internship, that he will be permitted to complete that internship before reporting for duty.

We all realize that plans for the call-up of doctors depends on the world situation and on the number of men who secure commissions prior to the call-up. It is of interest to note that although there have been several draft calls for physicians', there has been no actual draft of any physician.

Frank C. Owens, M. D., Chairman

Ad Hoc Committee on Membership

The Committee met at Columbia on February 16, 1964. A report was received from the office of the Executive Secretary which showed that there were approximately 366 physicians licensed in the state who were not members of the Association. Of this number 33 have retired from active practice, 42 are interns, 39 are colored doctors, 28 are in military service. This leaves 224 practicing physicians who are not members of the Association. Of these approximately 60 are in Charleston and 49 in Columbia.

Several members of the Committee reported on specific reasons as to why certain physicians did not belong to the Association. Some of these reasons were:

- A. The high cost of membership dues, particularly applicable to the physician in his first year of practice.
- B. A lack of knowledge of, or a lack of interest in the aims and accomplishments of organized medicine at the state and national level.
- C. The feeling that the annual meeting is much less worthwhile than seminars available all through the year in neighboring states. Also, that the meeting is more of a forum for older physicians whose chief interest is a short vacation and medical politics.
- D. The lack of responsibility shown by county societies and individual members in actively urging nonmembers to take an interest in organized medicine.

These are not listed in order of their importance nor was there unanimous opinion that all of the above factors were significant. The recommendations of the Committee are as follows:

- A. That the South Carolina Medical Association, through its constituent societies, make continuing effort to interest all physicians in the aims and importance of organized medicine, impressing upon them that our strength lies in unity.
- B. That the medical societies concerned make a



Dr. Howard Stokes

special effort to enlist those physicians employed in various state hospitals and other institutions.

- C. That this Committee be continued for another year, not necessarily constituted as at present, in order that the problem may be under continuing study.

Respectfully submitted,
W. V. Branford, M. D., Co-chairman
R. S. Clarke, Jr., M. D., Co-chairman

Mental Health Committee

In June 1963 the Governor's Advisory Group on Mental Health Planning was formed and convened. This 15 member group was appointed by the Governor and is to study and make recommendations for long range plans and projects. Ten of these members serve as Chairmen of Study Committees concerned with various categories of mental health. Staff members of the office of the Director of the Mental Health Commission provide administrative guidance, coordinating the program, writing reports and interpreting to the public. The initial reports of these several committees are to be studied by the Governor's Advisory Group in April 1964 and then distributed to all people, groups, and organizations known to be interested in mental health planning for reactions and recommendations. From this "feedback" the Governor's Advisory Group will submit its final report and recommendations to the Mental

Health Commission and Governor. The Medical Association's committee believes it imperative that all physicians and county medical societies express their keen and inherent interest and views and recommendations in this highly significant project.

South Carolina's Community Mental Health Services Act of 1961-62 was seen as a major step to provide opportunities for all regions of South Carolina to develop local mental health programs. This concept of community responsibility and action providing mental health care at the site of occurrence, at or near the patient's home, is in line with the more progressive and enlightened trends nationally. An implementation of this program would facilitate comprehensive and coordinated treatment of our mentally ill locally. This will avoid the displacement, dislocation, removal and rejection of our mentally ill from their families and communities.

Public Law 88-164 was signed into law by President John F. Kennedy in 1963. It provides for construction of research centers and facilities for mentally retarded and also for construction of community mental health centers. The basic purposes are to stimulate and assist states in providing comprehensive local mental health care. The President urged "a return of mental health care to the mainstream of American Medicine." This concept and this law were in full agreement with the concepts and aims of the American Medical Association Council on Mental Health and of this Committee. Physical and functional inclusion of these centers into the general medical hospitals and clinics could help improve and equalize treatment for the mentally ill. Continued separation of the treatment of the mentally ill from the physically ill perpetuates the tragic dichotomy of mind and body and impedes the progress of medical care, especially for the mentally ill. The nature and character of these "centers" will depend to a large degree on the expressed desires and concerted efforts of individual communities.

The American Medical Association Communications Division, working through their Department of Mental Health, has distributed a series of 13 half hour radio programs on mental illness and mental health to over 500 radio stations throughout the nation and to state medical societies and mental health chairmen. Outstanding authorities make up panels discussing subjects such as the nature of mental illness, the family, the aged, research, etc. These are available to medical societies, mental health chapters, study groups and others.

The South Carolina Mental Health Association has continued its major role in working for improved treatment and care of the mentally ill, in developing public support for these programs, in educating the public in the problems and needs in these areas, in assisting in and coordinating efforts of many interested groups. The South Carolina Mental Health Association gave wide distribution to the 1963 report of this committee. The South Carolina Mental Health Association held a very successful annual meeting in

Columbia in November 1963, using as its theme "Community Mental Health." This organization and its membership are to be highly commended for their dedicated work.

The National Congress of Mental Health will be convened by the American Medical Association Council on Mental Health in Chicago in November of 1964 with the theme "Community Mental Health Services and Resources-Mobilization and Orientation." Representatives of all groups interested in mental health will be invited to participate.

The South Carolina Mental Health Commission is composed of five members, appointed by the Governor, on the advice and consent of the Senate. It is charged with the responsibility of setting policies and rules and regulations governing the operation of the state's Mental Health program. This program includes the treatment and care of approximately one half of all hospitalized patients and an ever growing number of outpatients. There is but one physician in its number. This committee believes the South Carolina Medical Association should support and assist this dedicated group of men. We believe greater medical (including psychiatric) augmentation from the South Carolina Medical Association should be offered and provided.

Several important mental health legislative measures are (as of March 1, 1964) in process. These will have been acted on by the time of the annual meeting. They are too involved and undetermined to be included in this report, but publication of them is anticipated. Progress has been made in attempts to correct the concerns expressed by the Charleston County Mental Health Committee.

Recommendations

1. That members of the Medical Association be reminded of the 1963 report of this committee.
2. That intensive study be made by all physicians and County Medical Societies of the reports of the Governor's Advisory Group on Mental Health Planning. Specific response and recommendations are imperative.
3. That physicians and County Medical Societies actively participate in the development of Community Mental Health Centers with particular attention toward inclusion into existing general medical facilities.
4. That the Council and House of Delegates consider ways and means to support, assist and augment the work of the South Carolina Mental Health Commission.

James B. Galloway, M. D., Chairman

Advisory Committee to The Woman's Auxiliary, South Carolina Medical Association

Due to illness, the Chairman of this Committee was unable to attend the Executive Board Meeting held in Newberry, South Carolina, on September 18, 1963. However, we have been advised by telephone communication as well as letters from the President

of the Woman's Auxiliary to the South Carolina Medical Association, Mrs. Ralph P. Baker, and we feel that the program she has outlined is a very excellent one. She has taken into consideration suggestions from Mrs. Stoltz, the National President of the Auxiliary, as well as those made by Dr. Robert Wilson, President of our State Association.

The Committee wishes to go on record as congratulating Mrs. Baker for the accomplishments she has made in carrying out this excellent program.

Mordecai Nachman, M. D., Chairman

Special Committee on School Health

The special committee on School Health met February 12, 1964 in the office of the Department of Maternal and Child Health, Columbia, South Carolina. Present were Dr. David C. McLean, Dr. Hilla Sheriff, and Dr. Charles H. Zemp, Jr., Chairman. The overall role of the special committee was discussed and the committee made several recommendations in an effort to increase the value of this committee, both to the South Carolina Medical Association and to the real function of the committee; namely, the improvement of the health of the children in school.

(1) It was recommended that to provide continuing programs, the membership of this committee should be appointed on a staggered, or overlapping basis.

(2) It was suggested that the chairman of this committee should have served as a member of the committee for at least a two year period prior to being appointed chairman, so that he might be familiar with all phases of interest encompassed by this committee.

(3) It was further suggested that the present membership, consisting of six pediatricians, might be enlarged to include, in addition, a general practitioner, an ophthalmologist, and an otorhinolaryngologist. These additional fields represent practitioners who examine and treat children who present most of the medical problems involved in the school age group.

(4) It was recommended that the South Carolina Medical Association continue its efforts to establish functioning school health committees on a county by county basis. That these committees should include at least one physician, to act as chairman, plus the county health officer, representatives of the schools in the county, and a representative of the PTA. It was felt that in this manner the South Carolina Medical Association could contribute more valuably to the betterment of the health of school children. Dr. Sheriff requested that a list of the chairmen of all county school health committees be sent to the Department of Maternal and Child Health, so that information from the Department may more easily be transmitted to those most interested in it.

(5) It was further recommended that the Special Committee on School Health meet at least once yearly with the State Joint Health and Education

Committee. The joint committee is composed of members of the Department of Education, Department of Health, State Mental Health Commission and State School Finance Commission.

(6) The committee discussed procedures for the treatment of ringworm of the scalp, pediculosis, and intestinal parasites, and made recommendations to the Department of Maternal and Child Health for use by Public Health Nurses in schools.

(7) It was further recommended that a physician, through local school health committees, plan with school and health department personnel for pre-school clinics and for medical examinations of medically indigent children, and for correction of abnormalities on any grade level when significant deviations from normal are observed by the teachers or school nurses.

(8) The committee recommended that periodic medical and dental examinations of pupils be made at least three times during the twelve school years, probably during the fourth, seventh and tenth grades.

(9) The committee recommends that physical examinations be made of pupils on any grade level prior to participation in strenuous physical activities, such as physical fitness tests or athletic sports.

(10) The committee reaffirmed its approval of the presently employed method of screening vision on pre-school and school children by use of trained PTA volunteers.

(11) The committee approved the presently used program of oral hearing testing as conducted by the State Department of Education.

(12) The Committee wishes to thank particularly Miss Mary Louise Free, Pediatric Nursing Consultant for the Department of Maternal and Child Health, for her valuable contributions to our discussion of the problems of school health.

Respectfully submitted,

Charles H. Zemp, Jr., M. D., Chairman

Public Health Information Committee

Following his election to the Presidency of the South Carolina Medical Association, Dr. Robert Wilson appointed an ad hoc Committee on Public Health Information to serve for a one year period. Appointed to this committee were Drs. Louis P. Jervy, Chairman, Howard B. Smith, Jr., Harold E. Jervy, Jr., Waddy G. Baroody, Jr., and Malcolm U. Dantzer. Dr. J. I. Waring was asked to serve as an advisor and Dr. Leon Banov was later asked to serve as a consultant. Dr. Willard B. Mills was appointed to the committee at a subsequent meeting.

The Committee first met in July, 1963 and formulated its plans. Each member of the committee was asked to contact the managing editor of the newspapers in his location, seeking an opinion as to how the Medical Association could best fulfill its purpose of disseminating health information. After interim correspondence between the committee mem-

bers and the chairman, a second meeting was held in October, 1963. It appeared that there was no great desire by newspapers for a regular health column submitted by the South Carolina Medical Association. The editors felt that many such columns were already available and were being printed. There did seem to be an interest in and a need for articles pertaining to certain *current* local and state health problems. There also seemed to be a need for readily available consultative service to the newspapers at the time such health issues should arise.

On the basis of this information, the Committee recommended: (1) that committee members be designated "newspaper consultants" for their geographic area, (2) that the newspapers be advised of the names of these consultants and how they could be contacted, (3) that each consultant be authorized to supply information on health matters to newspapers in the name of the Committee and the South Carolina Medical Association, (4) that if newspapers desired more than a simple consultation, the consultant be authorized to personally write articles on chosen subjects or refer the request to the committee chairman who, with his advisors, would prepare such articles. A central file of releases, sample articles, etc. could be developed at the committee headquarters, (5) that all newspapers be advised of the committee's plans and (6) that a few articles of statewide interest be submitted from the committee headquarters to note the reaction of the press.

On December 29, 1963 a letter, incorporating this information, was sent to the managing editor of each daily and weekly newspaper in South Carolina. It was decided to adopt a "wait and see" attitude for the next few months to determine whether or not this service was utilized.

The Charleston News and Courier expressed an interest in publishing a regular series of health articles on a trial basis. Therefore, on December 29, 1963 an initial article on "Hepatitis" appeared in the News and Courier with the notation that this series was a "Function of the Public Health Information Committee of the South Carolina Medical Association." Subsequently, articles have been written for each Sunday paper on such subjects as "Antibiotic Therapy," "Botulism," "Organ Transplant," "Obesity," "Smallpox," "Snakebites" and other subjects. The effectiveness of these articles has not been evaluated and they are still being published.

The committee, in conjunction with the Charleston County Medical Society, has sponsored the production of two television tapes on "Poisoning" and "Peripheral Vascular Disease" suitable for viewing by lay audiences. These tapes were produced under the supervision of Dr. Dale Groom following his regular medical ETV program and using the available speakers. Newspapers were advised of the existence of these tapes through a news release and their circulation to television stations throughout the state has begun.

The committee plans to meet to evaluate the effectiveness of the year's effort at the time of the South Carolina Medical Association meeting in May, 1964.

Louis P. Jervey, M. D., Chairman

Committee on Nursing Education

The committee had many meetings and had the benefit of the Committee on Nursing of the Trustees of the Medical College and of the Governor's Special Committee on Nursing. We also had the pleasure of meeting with representatives of the nursing profession of the state and of the Nurses Examining Board. We know the following will not solve all the problems but it should lend itself well to a beginning point, and we recommend it to the House of Delegates.

The Special Committee on Nursing Education of the South Carolina Medical Association met and recommendations were made under the general headings of:

- (a) Improved Nurse-Doctor relationships
- (b) Nursing Education
- (c) Examining Boards.

(A) *Improved Nurse-Doctor Relationships*

1. It is recommended that better liaison be established between the nursing and medical professions by a joint committee with continuity. This committee could be appointed by the Executive Board of the State Nurses Association and by Council of the State Medical Association with staggered terms. Communications between the two professions at all levels is desirable.

2. It is recognized that the doctor is responsible for the patient's care and that the nurse is an indispensable member of the team to provide medical care for the patient. She, being a member of the team with the doctor, is responsible for carrying out the orders and instructions in the patient's care.

(B) *Nursing Education*

1. Recognizing that a nursing shortage exists and that more nurses are needed, it is felt that the "degree school of nursing," while commendable in limited degree, cannot be expected to fill the gap in the nursing shortage.

2. It is recommended that better relationships be established between the "working nurse" and the "academic" nursing staff.

3. It is recommended that the doctors teach the principles of disease and their treatment to student nurses and that the nursing staff continue to teach the principles and techniques of nursing.

4. It is recommended that doctors actively participate in formulation of the nursing school curricula.

5. It is recommended that doctors *actively* and *willingly* cooperate and accept responsibilities of training and teaching and counselling of nurses and student nurses.

6. It is recommended that doctors and nurses

actively cooperate in expanding the teaching of practical nurses.

7. It is recommended that the state provide supplementary funds so that the individual hospitals may not be required to bear the costs of the "diploma schools."

8. It is recommended that the South Carolina Medical Association look into the accreditation of hospitals in the area of patient nursing care, institutional and private.

(C) Nurses Examining Board

1. It is recommended that the board for examining and licensing nurses in South Carolina be changed so that the board be constituted of four nurses and four doctors and that a nurse be made chairman of this board.

James H. Gressette, M. D., Chairman

I appreciate the eagerness, thoroughness and astuteness of the members of the committee in helping to prepare this report.

James H. Gressette, M. D.

Committee on Post-Graduate Medical Education

Preamble:

Three meetings of the Post-Graduate Medical Education Committee have been held. Following the first two meetings, a questionnaire was sent out and the tabulated results of this questionnaire are appended to this report. It was generally felt by the members of the Post-Graduate Education Committee that the greatest danger involved in this project is for the Committee to proceed in too many directions at the outset.

Part I

It was recommended that the program of the committee for the first year should primarily be involved with some type of short in-residence "brush-up" courses designed for assistance to the general physician. These informal courses would be held at the Medical College of South Carolina and a charge of from \$25 to \$50 would be made as a registration fee. Specifically, it was recommended that three departments be requested to offer this first series of workshops and these are cited because of specific interests already expressed by various physicians in the state.

1. It was recommended that the Department of Radiology offer a three-day workshop entitled, "Radiology for the General Practitioner."
2. It was recommended that the Department of Anesthesiology undertake a three-day workshop entitled, "Anesthesiology for the General Practitioner."
3. It was recommended that the Department of Medicine sponsor a course of several days entitled, (ECG) for the General Practitioner."

It was the recommendation of this committee that these workshop-type programs be primarily the responsibility of the specific departments involved at the Medical College of South Carolina. However, it



Dr. George Johnson

was felt that additional physicians in these particular specialties could be invited from other medical centers in the State of South Carolina to assist the faculty members in these presentations. Steps have been taken by this committee to assist the Medical College in securing the assistance of these specialists from other medical centers over the State of South Carolina. It is realized that the routine work must be carried out in these departments at the Medical College and it was felt that the visiting specialists could assist members of the department at times when the pressure of the work of the day made it difficult or impossible to participate in instruction of the men attending the workshop.

It was further felt that a definite program of publicity should be given these workshops. It was specifically recommended that a pamphlet be issued and that this pamphlet should give a brief program of the work to be covered. This pamphlet should also contain an application form as well as information relative to the cost of the course. *Pre-payment* registration is recommended for this series of courses.

Part II

It was felt that perhaps consideration should be given to enlarging the Post-Graduate Education Committee slightly to include at least one or more general practitioners.

Part III

Members of this committee unanimously endorsed the present Educational Television Program. It was felt that this program should be continued. Further, the South Carolina Medical Association should play an active role in publicizing and promoting the Educational Television Programs. Specifically, it was urged that each County Medical Society appoint one member who might assume responsibility for making the necessary local arrangements for viewing the

programs and reminding members of dates and times of the television programs.

Part IV

With the progress of time, additional recommendations will be made by this committee. As a result of the questionnaire which was sent out, this group is considering the possibility of specialized formal seminars at the Medical College. However, it is felt that first place should be given at the present time to the less formal program designed to assist the general physician in his daily problems.

William A. Klauber, M. D., Chairman

SPECIALIST 51% NON-SPECIALIST 49%
REPORTING:

1. Would you like Courses in continuing Medical Education provided by M. C. S. C. in Charleston:
- | | | | | | |
|-----|-----|-----|-----|-----|-----|
| Yes | 235 | 83% | Yes | 253 | 79% |
| No | 47 | 17% | No | 64 | 21% |
- (a) Ideal duration:
- | | | | | | |
|--------|-----|-----|--------|-----|-----|
| 1 day | 68 | 21% | 1 day | 53 | 16% |
| 2 days | 158 | 49% | 2 days | 156 | 50% |
| 3 days | 76 | 23% | 3 days | 81 | 25% |
| 4 days | 17 | 7% | 4 days | 22 | 74% |
- (b) Willing to pay \$10-\$25:
- | | | | | | |
|-----|-----|-----|-----|-----|-----|
| Yes | 175 | 89% | Yes | 283 | 94% |
| No | 22 | 11% | No | 14 | 6% |
- (c) Presently attended similar Courses elsewhere:
- | | | | | | |
|-----|-----|-----|-----|-----|-----|
| Yes | 167 | 58% | Yes | 125 | 43% |
| No | 121 | 42% | No | 161 | 57% |
2. Would you like visiting Physicians or Teams of Physicians to visit local areas for lecture, seminar or bedside teaching:
- | | | | | | |
|-----|-----|-----|-----|-----|-----|
| Yes | 175 | 64% | Yes | 229 | 73% |
| No | 95 | 36% | No | 82 | 27% |
3. Would you like a tape recording Lending Library at M. C. S. C.:
- | | | | | | |
|-----|-----|-----|-----|-----|-----|
| Yes | 182 | 55% | Yes | 210 | 56% |
| No | 145 | 45% | No | 104 | 44% |

Annual Report of
The Executive Committee
of The South Carolina
State Board of Health
W. R. Wallace, M. D., Chairman
(For Calendar Year 1963)

The State Board of Health began the calendar year of 1963 on a note of optimism, highlighted by the dramatic decline in the number of cases of poliomyelitis since the introduction of the vaccine. Under the Federal Vaccination Assistance Act for pertussis, diphtheria, tetanus, and polio, funds were made available for immunization of the population under five years of age, and plans were approved and carried out for a crash program of polio vaccination in a mass immunization effort on a statewide basis. Also approved was the recommendation of a "Statement on Status of Measles Vaccines" by an Ad Hoc Advisory Committee of the American Medical Association. Other specific immunization schedules were made subject to the recommendations of

the Reference Committee on Public Health which determines immunization policies.

A resurvey of existing medical facilities in the State resulted in some changes for the 1963-1964 State Plan. The major change concerned the method of distributing general hospital beds to the various counties. Information on this subject is contained in the following report on "Hill-Burton and Licensing Affairs" of the Hospital Division of the State Board of Health.

Report on Hill-Burton and Licensing
Affairs

During the period 1947-1963 over \$95 million, of which over \$48.3 million took the form of grant-in-aid federal funds under the Hill-Burton Program as amended (P. L. 725 - P. L. 482), have been or are currently being expended in this State to provide 25 completely new hospital projects and 1 equipment only project, 58 adjunct hospital facility additions, 3 nurses' training schools and in addition 2 similar institutions as part of general hospital projects, 3 nurses' residences and in addition 5 similar institutions as part of general hospital projects, 31 public health centers, 2 additions to public health centers, 63 auxiliary health centers, 7 chronic disease units and 2 such units in multiple projects, 8 diagnostic and treatment centers as well as 3 similar centers as multiple projects, 8 nursing home projects, and 4 rehabilitation centers.

The Congress and the U. S. Public Health Service under the Hill-Burton Program for the fiscal year 1963-1964 allocated \$5.1 million to South Carolina to assist communities in constructing public and non-profit general, mental, tuberculosis hospitals, public health centers, laboratories, nurses' training schools, chronic disease facilities, outpatient departments, rehabilitation facilities, and nursing homes. About \$1.6 million of the allotment was earmarked by the federal authorities for the construction of rehabilitation centers, outpatient departments, and long-term care facilities.

The South Carolina State Board of Health, in collaboration with the 25-member Hospital Advisory Council, prepared a State Plan for the fiscal year 1963-1964 which indicates the need for and the proposed location of additional facilities on a statewide basis and in each of the 46 counties. This Plan, which was approved by the U. S. Public Health Service on August 14, 1963, contains among other things an improved method of determining bed needs for a community or hospital area. General hospital beds have been programmed to the 46 counties and hospital areas on the basis of utilization rates and population, taking into account such factors as the referral of patients to the larger hospitals with highly specialized medical staffs, medical programs for the aging, and economic social factors which indicate the need for and ability to purchase hospital care.

All of the federal construction funds for this fiscal year have been offered to eligible sponsors, and we can forecast the following: a general hospital for

Lexington County; public health centers at Estill, Hampton, Greenville, Camden, Greenwood, and Coward; a mental health clinic in Greenwood; hospital at State Park for mental patients; nursing homes at Newberry, Barnwell, Marietta, and Mullins; and a chronic disease addition to the Georgetown County Memorial Hospital.

On November 1, 1963, the U. S. Court of Appeals for the Fourth Circuit ruled in Richmond, Virginia, that hospitals that accepted Hill-Burton funds must open their facilities and staffs to all races. ("Separate but equal" provision of Hill-Burton Act ruled unconstitutional.)

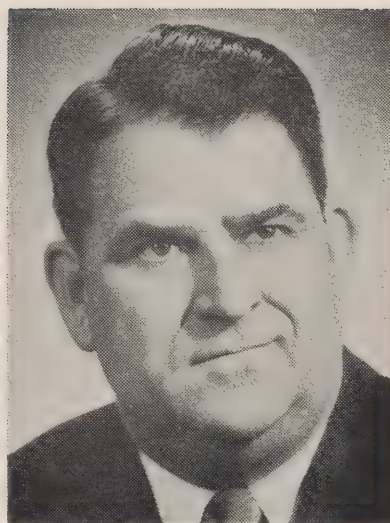
As for Hill-Burton legislation itself, the authorization for appropriations for construction expires July 30, 1964. Therefore, what the future holds in store lies pretty much in the lap of Congress. A five-year extension for the Program is being requested by the U. S. Public Health Service.

The Hospital Division of the South Carolina State Board of Health, through the Licensing Program, issued licenses to nursing homes based on a new classification system (building with a fire resistance rating, nursing and ancillary personnel employed by the facility). On July 1, 1963, nineteen homes (913 beds) qualified for Class I licenses based on the new grading system. During the last six months staff members of the Hospital Division's Licensing Program have devoted considerable time and effort toward upgrading care in existing facilities and encouraging construction of more Class I nursing homes. The result has been an increase in Class I nursing homes from the 19 homes mentioned above with 913 beds to 35 Class I homes with 1,539 beds. This upgrading process has come about by virtue of the fact that the Department of Public Welfare pays higher rates to Class I nursing homes than they do to Class II or III nursing homes. At the present time most of the facilities that have a Class III license do not have a one-hour fire resistance rating. The South Carolina Department of Public Welfare can now make vendor payments to nursing homes constructed and operated by county hospitals for nursing and convalescent care rendered to inpatients who are eligible for public assistance.

Personnel

The past year saw an increase in the total number of employees of the State Board of Health from 976 to 1,009. This increase of 33 new employees is attributed mostly to the increase in programs and services of the Maternal & Child Health (Migrant Health, Mental Health), Disease Control (Nursing Home and Vaccination Assistance Programs), and Health Mobilization Divisions. During the past year the services of 9 of our employees were terminated by retirement, and the services of 7 of our employees were terminated by death.

During the past year, in addition to the 5 existing payroll deduction insurance plans, our employees



Dr. Joseph Cain

were offered the opportunity to participate in a new accident insurance.

Our Directory of Personnel, which lists the staff of all county health departments, divisions, and sections of the State Board of Health, was completely revised during the year. Six new class specifications were established under our Merit System position classification plan, and 5 of our old classes were revised during the year. Also, a study of our compensation plan resulted in improving the salary ranges of 9 positions.

Vital Statistics

The movement of industry into the State is accelerating the increase in population which in turn results in an ever-expanding program for registering births, deaths, fetal deaths, marriages, divorces, and annulments along with the supplemental documents necessary for correcting and amending the original documents. In addition to the increase in the number of events occurring annually as a result of the expanding population, a substantial increase in marriages and births beginning with the current year and continuing for several years as a result of the substantial increase in births following World War II is expected. These post-war babies have now reached the marriageable age and are beginning their own family units. This factor alone is expected to increase the registration and housing of permanent records from approximately 140,000 annually to approximately 180,000 annually. These figures are exclusive of the supplemental documents permanently filed for the purpose of correcting and amending the existing records. The demand for services continues to increase as industries, governmental agencies and civic organizations develop programs for utilizing the records and the data contained in the records.

Demands for amending the certificates as a result of legal actions continue to increase. For example, there were 1,741 certificates amended as a result of adoptions and 189 certificates amended through

court order. These court order actions dealt primarily with legal change of name. In addition to these changes through court action, there were 1,009 certificates amended as a result of the mother marrying the father of the child after the actual birth of the child. This is accomplished through special affidavit forms designed with the cooperation of the Attorney General's office.

At the present time there are approximately 6,500 delayed certificates of birth filed annually. Also currently corrected are approximately 15,000 certificates annually through affidavits and supplemental documents to verify the correct facts.

During the calendar year 1963 the Bureau of Vital Statistics participated in many special research and statistical projects involving committees of the South Carolina Medical Association, individual physicians, medical groups from other areas, U. S. Public Health Service, various state health agencies, universities, various associations, industries, and others.

The Bureau of Vital Statistics annually publishes a Statistical Supplement of almost 600 pages compiled from data contained in the records filed in the department.

Public Health Education

During the year the State Board of Health maintained a library of some 350 health films and processed and distributed an average of 150 films monthly, providing nearly 4,000 showings before more than 220,000 South Carolinians. More than 40 pieces of audio-visual equipment were provided on loan each month, and two classes in audio-visual aids techniques were conducted. Exhibits were prepared for the State Fair, eight county fairs and other specialized meetings, and numerous photographic presentations were created. The *Monthly Newsletter*, periodic news releases of public health interest, and the Annual Report were prepared and distributed. Two orientation institutes for new employees were conducted. Numerous daily requests for health information were handled, and many other services and functions were undertaken with the goal of stimulating individual and community interest in health and providing methods to meet health needs more effectively.

Drug Inspection

In cooperation with federal, state, and local authorities the program of investigations and prosecutions of alleged irregularities and violations of the various drug laws of South Carolina has continued.

Thirty-five defendants were convicted in General Sessions Court during 1963 on charges of violation of drug laws, 15 for violation of the Narcotic Act, 15 for possession and sales of amphetamines, and five for possession and sales of barbiturates. Three pharmacists, convicted of unlawful sales of drugs, were cited to appear before the Board of Pharmacy. Their licenses to practice pharmacy were suspended for an indefinite period. Three physicians surrendered their narcotic tax stamps due to irregu-

larities in prescribing and dispensing narcotic drugs. Two of these were cited to appear before the Board of Medical Examiners. Both were placed on probation by the Board.

Nineteen cases are pending before the courts as of December 31, 1963, involving violations of the Narcotic, Barbiturate and Dangerous Drug Acts.

Local Health Services

The Division of Local Health Services has continued to assist county health departments in carrying on a well-organized and balanced health program. It has assisted in the orientation and in-service training of nurses and sanitarians.

The record keeping in county health departments has been markedly improved during the year by the newly added Records Consultant assisted by the Directors of Public Health Nursing and the Chief Sanitarian.

During the year a full-time staff of three has been employed in the Health Mobilization Program. In consultation with the Committee on Emergency Medical Care of the State Association, it has assisted counties in the development of county health mobilization plans, and, with federal assistance, the twenty-six 200-bed civil defense emergency hospitals now located in South Carolina have had three-day supply operational capability increased to a 30-day capability. A newly developed training hospital is now being circulated through the State to enable physicians, nurses, and allied health personnel to become familiar with the equipment and the operation of these hospitals under emergency conditions.

Disease Control

The two most significant activities of the Division of Disease Control in 1963 were in poliomyelitis immunization and expansion of the chronic illness program. Since the advent of the inactivated Salk poliomyelitis vaccine, more than 3,500,000 doses have been given in the State. Cases of poliomyelitis have been reduced from an annual average of approximately 100 cases to six cases in 1962 and ten in 1963. It could be reasonably expected that incidence of this disease would continue at this low level. The licensing of the attenuated oral poliomyelitis vaccine has added another effective tool in preventing this disease. During 1963 and early 1964 all counties in South Carolina completed county-wide programs with the three types of oral vaccine. More than 1,500,000 citizens in the State have had the three types. This should insure a continued or even greater reduction in the incidence of this disease.

Influenza occurred in epidemic proportion early in 1963 but was not statewide in occurrence. The disease in 1963 was chiefly of Influenza A type. The other communicable diseases continued at low incidence, notably diphtheria with only 17 cases, typhoid fever with only nine cases, and no cases of smallpox since 1947.

Chronic Illness

The chronic illness program has been expanded

with greater activity in the nursing homes and in the care of the chronically ill in their own homes. Nine nurses in seven counties and two nurses from the Division work with nursing personnel in nursing homes teaching and demonstrating to them techniques of restorative nursing care. This makes it possible for many patients to be rehabilitated to self-sufficiency. Two dietitians on the program work with the food service personnel and nursing home administrators to improve the purchase, preparation, and serving of nutritious and palatable food. The State Board of Health has emphasized public health nursing to chronically ill patients in their own homes. Rehabilitation is emphasized in these visits with the purpose in mind of restoring these patients to self-sufficiency and to activity in the home and community. Workshops for public health, hospital, and nursing home nurses were conducted, and one short course for nursing home food service personnel was given by the Home Economics Department of Winthrop College in cooperation with the State Board of Health.

Rabies and Insect Control

The rabies control and insect control programs have continued with their usual success of recent years.

Immunization

With the implementation of the National Vaccination Assistance Program, the State Board of Health is developing a program for the continued high level immunization of the people, particularly of children under five years of age against the four diseases: poliomyelitis, diphtheria, pertussis, and tetanus.

Cancer Control

Cancer control services are available to all eligible residents of the State upon referral by their family physician. These services are available through the Cancer Control Section and the State-Aid Cancer Clinics.

Females with cancer of sites other than the genital system and referred to several State-Aid Cancer Clinics routinely have vaginal smears for cytological examination.

In the State-Aid Cancer Clinic in Charleston clinical investigation of all patients reported as having dyskaryosis of the cervix by the Department of Pathology at the Medical College is underway.

The Cancer Control Section and the State Cancer Society have continued to extensively teach breast self-examination. However, the number of early cases of breast cancer continues to be low. Consequently, mammography on a selected basis has been undertaken in several of the State-Aid Cancer Clinics. By becoming more familiar with this technique, clinic physicians will be able to screen more extensively apparently well females for the presence of early breast cancer.

Heart Disease Control

A stroke rehabilitation program in Spartanburg County has as its objectives to provide better diag-



Dr. Charles Wyatt

nostic facilities within the general hospital, to demonstrate and encourage the use of rehabilitative therapy in the treatment of the stroke patients, to provide professional training for physicians and nursing personnel in the treatment of stroke patients, to extend limited physiotherapy and nursing service to the homes of stroke patients, to assist families in assuming their responsibilities for the care of the stroke patients at home, and to promote self-care of the patients.

With this program it is hoped to improve professional training, diagnosis, treatment, and rehabilitation. The treatment is under the direction of the patient's attending physician, utilizing the general hospital facilities during the hospital period and the county health department nursing staff to extend nursing service to the patient's home.

The fluorescent streptococcal antibody technique is now available to physicians living in the Piedmont area of the State. Needed equipment to carry out this rapid method of examination of smears for streptococci has been placed in the Spartanburg General Hospital where its operation and training is under the capable supervision of the hospital's pathologist.

In the event the "bugs" are removed from the apparatus for the recording of heart sounds, we anticipate using this equipment in a cardiovascular screening program, particularly in children.

Tuberculosis Control

The fact that tuberculosis is still a public health problem of considerable magnitude in South Carolina does not seem sufficiently tragic to motivate an apathetic public to band together as a community to attack the disease on all fronts. Many communities look upon present tuberculosis statistics with indifference. Many persons are subjecting themselves to the perils of tuberculosis in spite of the fact that

tools and facilities for early diagnosis, prompt treatment, and long-term follow-up have been provided at their doorsteps. With our sights raised and geared toward tuberculosis eradication, our approach has been focused on individual counties. More and more emphasis has been placed on tuberculosis casefinding through contact investigation, adequate treatment of all known tuberculosis cases, prompt examination and disposition of tuberculous suspects, prophylactic treatment with INH of all household contacts whether tuberculin reactor or non-reactor, and continued surveillance of persons with inactive tuberculosis. This five-point program is now in effect in 36 counties of South Carolina and will be extended to the remaining 10 counties as rapidly as available funds and personnel will allow.

Tuberculosis incidence rates are 18.2 per 100,000 whites and 62.2 per 100,000 Negroes. In short, tuberculosis in Negroes presents an acute problem in South Carolina.

The Tuberculosis Control Section, in spite of the excellent law for the commitment of the recalcitrant with active tuberculosis, continues to be hamstrung by the unavailability of forcible detention facilities at the State Sanatorium. The appropriating bodies have continued to be insensitive to requests by the Sanatorium for funds to provide locked wards. However, persistence on everyone's part may finally pay off.

Venereal Disease Control

Reported cases of venereal disease in South Carolina (11,723) practically equal the reported cases of all other communicable diseases combined (11,763). There were 753 new cases occurring (primary and secondary syphilis) as compared to 818 for calendar year 1962.

New cases of gonorrhea reported are slightly less than last year, there being 10,429 reported for 1962 as against 9,931 in 1963.

In the spring of 1962 two bills were passed by the General Assembly in the interest of improving the reporting of venereal disease and for facilitating epidemiologic follow-up on these cases. The first bill requires physicians to report all their cases of venereal disease in such form and manner as the State Board of Health shall direct. This means, in substance, that physicians are now required to report their cases by name. The second bill now requires that all laboratories report all of their positive serologies to the State Board of Health in like manner. These two bills now give physicians and laboratories complete immunity against legal action in the reporting of their cases.

Since the enactment of the above legislation requiring physicians to report their venereal disease cases and laboratories to report their positive tests for venereal disease, procedures have been set up for the processing of all reactive reports for syphilis. These procedures collectively constitute what is now known as our "Reactor Program" which became effective July 1, 1962, and which consists primarily

of matching laboratory reports against reactive morbidity reports and vice versa, followed by complete epidemiologic investigation. Subsequent to the launching of this program, our records indicate that for the calendar year 1963 approximately 25% of the total cases of primary and secondary syphilis reported in South Carolina were a direct result of follow-up of serologic reactors reported by laboratories.

During the past year every private physician in South Carolina has been visited one or more times by field representatives of the Venereal Disease Control Section. The purpose of these visits is to create among the medical profession a better understanding of the venereal disease program and a greater awareness of the services being offered them through the venereal disease control program.

Among the services referred to is included the matter of darkfield examinations by our field representatives as a diagnostic aid to private physicians. In South Carolina all field representatives of the venereal disease control program are trained in darkfield microscopy. Their services are readily available to all private physicians upon request. These men are also on call on week-ends and holidays. It should be mentioned also that whenever a private physician makes a diagnosis of early infectious syphilis (primary or secondary) whether by darkfield examination or otherwise, it becomes his community responsibility as well as a moral responsibility on his part to have this patient interviewed for contacts by a venereal disease field representative so that these contacts may be followed epidemiologically to control the spread of syphilis. In the calendar year 1963 there were 364 darkfield examinations performed by 12 to 14 representatives in addition to their other duties. In 120 of these examinations the *Treponema pallidum* was successfully demonstrated and resulted in 120 interviews and epidemiologic examinations. It should also be definitely understood that under no circumstances will the patient of any private physician be interviewed or even contacted without permission of the physician concerned. Furthermore, all information obtained whether by interview or otherwise concerning venereal disease patients or contacts is kept in strictest confidence.

Maternal and Child Health

The Division of Maternal and Child Health Continued its efforts to promote better facilities and services for the health of all mothers and children in South Carolina through a program of service and education.

Clinic Program

A total of 15,613 mothers received services at maternity medical clinics during 1963, and public health nurses visited 42,236 mothers during the maternity cycle.

There were 1,314 child health clinic sessions with 7,074 new patients registering for service and 15,542 patients returning for service. In addition to

these clinic sessions, nursing conferences were held in every county and supplemented by nursing visits into the homes when indicated.

Assistance has also been given to the local health departments in arranging for medical examinations of children, preferably by the private physician, prior to the admission in school. Programs of parent education with emphasis on readiness for school and continuous medical supervision with appropriate immunizations for their children are promoted.

Midwife Program

The program of training, supervision and control of midwives is still a necessary activity and is carried out through annual institutes provided by the Maternal and Child Health Division and also by monthly classes and direct supervision by the staff of the local health departments. In 1963 there were only 564 midwives certified for practice, and they delivered 5,594 babies. Five counties now have no midwives. Silver nitrate ampules are furnished to midwives for use in the eyes of the newborn babies whom they deliver.

Educational Programs

A credit course in Public Health Nutrition sponsored and financed by the Maternal and Child Health Division under the auspices of the University of South Carolina Extension Division was offered at the summer session, June 10 - 28, 1963, for three semester hours credit. Twenty-one public health nurses and one hospital nurse took this course. This course emphasized nutrition in relation to growth and development, maternal health, and family nutrition. Those taking the course are required to develop a nutrition project in their respective areas. A progress report will be required at the end of a year.

The Maternal and Child Health Division in cooperation with the State League for Nursing sponsored a two-day work conference primarily for hospital pediatric nurses, both in education and service, in June, 1963. The program was based on expressed needs of pediatric nurses for help in making more effective use of resources and allied agencies they have in their respective situations in improving patient care and in making student assignments and activities in pediatric nursing more meaningful in terms of educational goals and objectives. A demonstration was given on how the services of the public health nurses might be utilized in the hospital setting to help students gain understanding of how public health nursing functions in the community.

The Maternal and Child Health Division has continued to promote and sponsor post-graduate education for physicians in various phases of obstetrics and pediatrics. Twenty-five South Carolina physicians attended the three-day Obstetrics-Pediatric Seminar held in Florida cooperatively planned and sponsored by the Maternal and Child Health Divisions of the State Health Departments and the State Medical Associations of Florida, Georgia, Alabama, Mississippi, and South Carolina. This Seminar is accepted



Dr. Alfred Burnside

by the American Academy of General Practiice for credit in Category I.

Guest speakers from out of the state were financed for the annual meeting of the South Carolina Pediatric Society, the Postgraduate Medical Assembly of Central South Carolina and Joint Columbia Medical Society meeting, and the State League for Nursing.

Scientific and educational exhibits for meetings of medical specialty groups and other professional and lay groups were prepared.

Financial support was furnished by a per diem allowance for travel for quarterly meetings of the Maternal Health Committee of the S. C. Medical Association, payment of clerical assistance in compiling information on maternal deaths wherever the chairman is located, through payment of travel expenses for a member of the School Health Committee to attend the American Medical Association's Conference on Physicians and Schools, through payment of services for a resident of the Medical College Hospital to compile information for the American Medical Association's study on perinatal deaths.

Screening Program for Phenylketonuria

In cooperation with the State Board of Health Laboratories and fourteen hospitals in the State, the Maternal and Child Health Division has completed the blood study of newborn infants according to the Guthrie Screening Method. Our contribution to this study of 400,000 cases collected nationwide was 10,000. The results of this study will be made available at an early date. In the meantime, routine screening tests for phenylketonuria are being continued, and all doctors and all the child health clinics are being urged to use Phenistix for testing infants upon their first few visits to the doctor's office or to the clinic.

Mental Retardation Project

The statewide evaluation clinic for children up to seven years of age who are, or are suspected of being, mentally retarded has continued to grow. One hundred fifty-seven cases were evaluated with an additional 27 in the evaluating process and 73 applications pending. Cooperation with the various organizations, institutions, and agencies dealing with mentally retarded children is a strong part of this program.

Migrant Health

The State Committee on Migratory Labor, with the Director of the Maternal and Child Health Division as chairman, will continue to increase its efforts to protect the health of the migrants as well as the State's population along the migratory stream.

Through a grant from the Public Health Service a special project has been operating in the Charleston County Health Department since July, 1963. This project offers health services and in some instances medical care for migratory agricultural laborers and their families while they are in the county.

Accident Prevention Program

The objectives of the accident prevention program are to promote and develop in cooperation with official and non-official agencies program activities aimed at the reduction of deaths and disabilities resulting from accidents. The areas in which we have concentrated are home safety including poison prevention, traffic safety, and recreational safety.

School Health Program

The Maternal and Child Health Division has continued to provide consultation services to physicians and school health personnel to help provide and coordinate services for the school-age child. It has worked closely with the School Health Committees of the State Medical Association.

Crippled Children

The Crippled Children's Division has continued its regular diagnostic and treatment services through its clinic, hospitalization, convalescent and appliance programs.

An Orthopedic Clinic was established at Hampton County Health Department to serve three counties in that area so that children would have to go to Charleston for hospitalization and special treatment only. Other clinics will continue to be established as needed and when feasible.

As of December 31, 1963, there were 5,273 patients on the crippled children's program. During the 1963 calendar year 4,860 patients received services, 4,635 patients made 12,927 clinic visits, 778 patients spent a total of 12,571 days in the hospital, and 96 patients received a total of 10,500 convalescent home days.

The program for congenital heart disease patients has continued to increase—182 children seen in 1960 and 426 seen during 1963. During the 1962-1963 fiscal year 1,585 hospital care days were provided for congenital heart cases.

During the summer a two-week speech therapy course was held for cleft palate children in the Columbia District area in special need of concentrated speech therapy. Arrangements were made with the Carolina Children's Home to house these patients. This was the third summer that such a course has been held.

During the month of July 206 children (95 white and 111 Negro) attended the two orthopedic camps made possible by special annual grants of the Legislature since 1948. Training included use of upper

arm prosthesis, self-feeding, dressing, and general care of self, gait training, crutch walking, etc.

Several children were referred to National Jewish Hospital, Denver, Colorado; National Institute of Health, Bethesda, Maryland; and Alfred I. Dupont Institute, Wilmington, Delaware, for services not available in South Carolina. Since hospitalization was provided at no charge to the Division, transportation was arranged for these out-of-state referrals.

Several children were referred to Duke Hospital, and we were given the regular per diem hospital rate charged the North Carolina Crippled Children's Division.

Special clinics for seizure patients have been established and enlarged in the Columbia and Greenville areas.

Clinics are held twice yearly at Whitten Village by the Greenville Crippled Children's staff.

Patients from Pineland are eligible for treatment and appliances as necessary.

The Crippled Children's Division was handicapped and saddened by the serious illness of several staff members and the death of two members, Mrs. Minnie H. Blease and Dr. A. T. Moore.

Central office record keeping procedures are continuing to be revamped in order that information will be readily obtainable in regard to cost of cases by diagnosis and incidence of certain categories. The change in the diagnostic coding system will allow for more detailed breakdown by diagnostic category.

Dental Health

Education

Dental health education, prevention, and treatment constituted the major fields of activity in the Division of Dental Health.

The "Little Jack" Mouth Health Show, the most frequent and popular dental health contact with school children, played its 20th consecutive year in South Carolina elementary schools and kindergartens, appearing before approximately 118,000 children during the year.

Graded dental health materials, posters, crossword puzzles, booklets, and work sheets were supplied in limited amounts to elementary school teachers for dental health instruction in the classroom.

National Children's Dental Health Week, in cooperation with the American Dental Association, the South Carolina Dental Association, and local dental societies, was observed February 3 - 9, 1963. The Division assisted the schools, local health departments, and dental societies in the development, production, and utilization of dental health exhibits, models, and posters.

Fluoridation

The Division, operating under the policy of the State Board of Health, restated its recommendation that fluoridation, where feasible, be adopted in all communities having a public water supply.

More than 200,000 South Carolinians are presently

drinking fluoridated water, and already thousands of children are experiencing a 60% to 70% reduction in tooth decay. Five new installations were made during the year, which makes a total of 28 towns in the State adding fluoride.

In November, 1963, a ten-year post-fluoridation survey of 511 continuous resident children, ages 6 through 11, was made in the Mellichamp, Ellis Avenue, and Sheridan Schools of Orangeburg.

Controlled fluoridation began in Orangeburg in September, 1952. A base-line survey of dental caries experience among 1,232 white school children, ages 6 through 11 years, was made in 1953.

A five-year post-fluoridation survey was done in 1958. A comparison was made at that time of the caries experience of 586 continuous resident and 554 non-resident children with the base-line data.

The ten-year post-fluoridation survey made in November, 1963, showed a striking reduction in the amount of dental caries in both deciduous and permanent teeth. For example, in 1953 the average 6-year-old child had .65 DMF teeth; in 1963 this child had only .21 DMF teeth. This represents a reduction of about 68%.

A reduction in the DMF rate was observed in each age group. For example, comparison of the 1953 and 1963 findings in permanent teeth shows this reduction to vary from 67.69% in 6-year-olds to 31.49% in the 11-year-old age group.

There has been a reduction in the average number of missing teeth from .16 in 1953 to .05 in 1963. In other words, for every three teeth lost 10 years ago, only one is lost today.

There has been an increase in the filled rate in permanent teeth from .63 in 1953 to .75 in 1963, an increase of 19%. That dental care is being provided at an earlier age is evidenced by the increase in the filled rate for deciduous teeth. In 1953 there were .53 filled deciduous teeth per child, and in 1963 there were .97 filled teeth per child. This is an .83% increase in filled deciduous teeth. The percent of children with caries-free permanent teeth increased from 31.8% in 1953 to 47.9% in 1963.

The dental health status of the children in Orangeburg has been improved through fluoridation of the water supply. It has been shown that they have less caries, less teeth indicated for extraction, and more teeth filled in 1963 than in 1953. It is interesting to note that with fluoridation the dentists in Orangeburg are filling more teeth than before. Truly, the children of Orangeburg are benefiting from this safe, practical, and economical preventive dental health procedure.

In areas where the water is not fluoridated, the Division continued to urge the topical application of a fluoride to the exposed surfaces of the teeth. Although topical application of fluorides is not as simple and effective a preventive procedure as fluoridation, it is a worthwhile procedure for those children who do not or cannot have the benefits of



Dr. F. C. Owens

fluoridated water. Approximately 15,000 children in both white and Negro elementary schools received four topical applications of sodium fluoride, which includes cleaning the teeth and keeping them dry while a 2% solution of sodium fluoride is applied topically to the teeth.

Laboratory

Overall growth of the Laboratory's services during the past year is shown by an increase in tests and examinations to a total of 356,504 in the Central Laboratory during 1963 as compared with 332,546 in 1962. An additional 44,000 tests were made each year in the four District Laboratories and in four County Laboratories.

Continued testing for early detection of phenylketonuria, coordinated with the research program for prevention of mental retardation initiated in 1962 and described in our report for that year, has accounted for approximately 10,000 of the 24,000 additional tests.

Increased activity in other areas has been especially notable in the following laboratory sections:

Tuberculosis: Examinations for acid-fast Mycobacteria have outnumbered by more than 5,000 the tests made in 1962. Need for larger working space is especially noted in this section. This work is done in cooperation with the Tuberculosis Control Section of the State Board of Health whose program requires

casefinding and follow-up involving exacting laboratory techniques. Of more than 9,000 cultures, over 500 required further investigation by sub-culture and cytochemical tests, by which more than 200 cases of infection with atypical acid-fast bacilli were revealed. In 847 cultures, typical *Mycobacterium tuberculosis* was identified. Also in cooperation with the Tuberculosis Control Section, the Bacteriology Section of the Laboratory prepares old tuberculin solutions for distribution to county health departments and other medical installations requesting this material throughout the State. This freshly prepared material is mailed by the Central Laboratory at regular bi-weekly intervals or upon special request.

Serological tests for syphilis: More than 267,000 tests were carried out including over 257,000 qualitative VDRL tests and 9,462 titrations on specimens tested quantitatively, this procedure being routine on all sera yielding reactive or doubtful results in the qualitative VDRL test. Complement fixation tests were made in cases selected by the attending physician and the Chief of the Venereal Disease Control Section in collaboration with the Laboratory as special diagnostic problems. In 744 cases the Fluorescent Treponemal Antibody test was made, and in 22 of these the *Treponema Pallidum* Immobilization test was carried out at the Communicable Disease Center. The Treponemal tests, while too time-consuming and costly for routine use, have higher significance in the diagnosis of syphilis, in which routine testing by a well standardized flocculation test, as the VDRL, is more useful in the great majority of cases.

Expanding fluorescent antibody techniques: Now used in this Laboratory in the diagnosis of streptococcus Group A infections, rabies and syphilis and in identification of pathogenic *E. coli*, use of fluorescent antibody technique is now planned in the field of parasitology, for the diagnosis of toxoplasmosis.

Rabies: The fluorescent rabies antibody method has been especially valuable. After a period of 26 months during which no case of rabies was demonstrated in South Carolina, rabies was proved in this Laboratory by finding Negri bodies in the brain of a dog in March, 1963. Since then through December 31, 1963, a total of 11 animal cases have been demonstrated, including five bats, which were found in four counties and were the first cases of bat rabies proved in this State. The fluorescent rabies antibody technique is used routinely for examining all bats and as a confirmatory or supplementary method in examination of all animal cases (or suspects) in which human exposure is involved.

For the best utilization of the facilities of this Laboratory, especially in order to make widely available throughout the State tests requiring special equipment which may not be available in smaller laboratories, such as fluorescent antibody methods, better distribution of work throughout laboratories over the State is indicated. There are now more than 12

laboratories, widely distributed in South Carolina, having specialized medical supervision, with facilities for performance of tests which have now become routine, including the Rho factor and VDRL tests and many bacteriological examinations. Distribution of such tests in laboratory locations most convenient for physicians in different communities would allow this Central Laboratory to carry out more tests which are not elsewhere available and to assist in promoting uniformity and efficiency of routine tests by holding workshops and initiating and maintaining evaluation services. Requests for these services have been received from other laboratories. A beginning has been made in providing such services so far only in our Serology Section which carries out serological tests for syphilis. Due to work load and limitations of space, no other section of the Laboratory has been able to undertake these important activities, with the exception of the split milk sample program and milk laboratory survey.

A workshop in syphilis serology was held in January, 1963, attended by 14 participants from 11 hospitals and other medical installations. For the past 12 months an evaluation program has been carried on, in testing serum by the VDRL test, with participation by 30 laboratories which routinely make these tests in locations in all parts of the State, our Central Laboratory serving as the reference laboratory. This Laboratory is a participating laboratory in a similar program, with others of the 50 states, the Communicable Disease Center of the Public Health Service serving as the reference laboratory.

Other educational activities have included participation in the Orientation Courses organized by the Public Health Education Section of the State Board of Health and presentation of tours and brief talks on the functions of the Laboratory to student groups from schools of nursing and science classes.

Five members of the Laboratory staff attended courses at the Communicable Disease Center which included the application of laboratory methods to the diagnosis of tuberculosis and related mycobacterial infections, rabies and syphilis, the epidemiology of vector-borne diseases and the principles of fluorescent antibody microscopy.

Sanitary Engineering

The Division of Sanitary Engineering is responsible for the administration of health programs from a state level. It also participates in other programs handled principally by the counties of the State. One of the main functions of this Division in assisting the counties is to furnish, upon request, consultation services on public health problems.

The Division is divided into sections, each with specific responsibilities, including the administration of rules and regulations and/or laws governing activities which normally might be indicated by the section titles: Water Section, Sewage Section, Food Processing Section—Wholesale and Retail, Bedding Section, and Milk, Shellfish, Bottling Plant, and Frozen Dessert Section.

In addition to the specific activities listed, we are confronted with many public health problems which cut across all sections enumerated and impose other responsibilities upon the Division—for instance, responsibilities in connection with the planning and development of sub-divisions throughout the State; the consideration of public health implications in the proper planning of schoolhouse construction, motels, swimming pools, trailer parks, organized camps, etc.; industrial development; and many other projects of similar connotation. Activities in the field of food protection have been accelerated during the past year. We have assisted in the immediate investigation of all reported food-borne outbreaks.

The State Board of Health, in cooperation with the Water Pollution Control Authority, has developed an effective radiological laboratory, designed to monitor the environment generally and to perform duties as may be indicated in connection with the utilization of radioactive materials for any purpose throughout the State.

There is a strong liaison between the Engineering Division and the South Carolina Water Pollution Control Authority. All matters of mutual interest are discussed in the light of common benefit, leading to an appropriate solution for the betterment of health conditions throughout South Carolina.

Observation of the operation of this Division indicates the need of additional personnel to keep pace with the ever-expanding industrial picture of South Carolina and the attendant problems associated with explosive population increases.

Committee on Medical & Hospital Contracts

Our *Sickness and Disability Insurance*, written through the Educators Mutual Life Insurance Company, and serviced by Mr. Charles Dudley, 236 Ashley Court, Florence, S. C., continues to have a very satisfactory experience. Mr. Dudley reports that the enrollment is steadily increasing, which is good for the Association. The more participants we have, the stronger our plan.

Group Life Insurance Program—Our original program failed to attract a sufficient number of applicants. An attempt was made to find an insurance company to insure the applicants who had applied. After a prolonged search it was evident this could not be done and for the time being we have eliminated our group life insurance program.

High Limit Death and Dismemberment Policy, with Royal Globe Insurance Company, John M. Sadler, Columbia, S. C., broker—Continues to have good experience. This is a good policy and we hope that those physicians who do not have it will look into its possibilities.

Office Overhead Expense, written by North American Insurance Company, serviced by John Cappelman Insurance Agency, Charleston, S. C., is available in a very attractive policy to pay office expense when the physician is sick and disabled. This premium can be deducted as a business expense.

Retirement and Pension Plan—With the advent of the AMA plan for physicians who wish to participate and take advantage of the recent proposed Keogh Bill, your committee gave up further study of this question since the AMA plan seemed far and above anything we were able to locate.

Blue Cross - Blue Shield, along with Prolonged Illness Coverage Contract, continues to be the approved basic and *Major Medical Policy* for the Association.

The St. Paul's insurance group continues to write *Malpractice Insurance* for members of the Association. As you know, this insurance is bought on an individual basis through your local St. Paul Agent, whoever he might be, and is serviced by him. This plan is essentially the same as the standard life policy, with the exception the St. Paul Group reserves the right to settle any claim if and when they think necessary, whether or not the physician agrees. The logic in this is that they feel their legal staff is better able to ascertain when and if a claim would have to be paid than the physician and they might save money and litigation by following their best judgment.

Also, the St. Paul policy does not include certain exclusions found in the standard policy. The committee feels that the elimination of these particular exclusions is very favorable to the doctor and recommends that the members look into this particular aspect of the policy.

The contract calls for systematic adjustment of rating according to their experience with our particular group and is not dependent on the overall average of industry, which means that with a good experience in South Carolina we can expect our rates to be reduced and our rates will not necessarily reflect a poor experience elsewhere over the country.

Joseph P. Cain, Jr., Chairman

Committee on Industrial Medicine

During the past year there have been two developments of interest to the profession:

First, a bill was introduced into the State Legislature which would increase the membership of the South Carolina Industrial Commission from five to six members. Additionally, a Commissioner hearing a particular case would be barred from participation should the case be appealed to the full Commission for disposition. The House disposed of this Bill by increasing the membership, but failed to bar the hearing Commissioner from full Commission participation in an appealed case. The Senate now has the Bill under consideration and has not acted on it at the time of this report. It appears that failure to bar the hearing Commissioner from full Commission consideration of a case would allow prejudice to enter.

Second, one member of the Association had cause to complain to the Medical Director of the South Carolina Industrial Commission because the Commission failed to authorize payment for physiotherapy treatments given in his office and not by a registered

therapist. His county has only one registered therapist who is employed in the local hospital and who does not have adequate time for out-patient work. The office treatments were given by a nurse under the doctor's direction and supervision. It was his contention that the Commission was negligent in this respect and was encouraging increased costs in the care of such patients. There can be no logical argument to the fact that physiotherapy in the forms of whirlpool, diathermy, microthermy, ultra-sound, and similar routines, does not require the services of a registered therapist.

It is requested the Reference Committee consider further follow-up, especially regarding the second circumstance above.

J. M. Perry, Jr., M. D., Chairman

Benevolence Fund

During 1963 the Benevolence Fund received an appropriation from the South Carolina Medical Association and several donations from the various county medical auxiliaries. At the present time we have only one recipient who is receiving monthly checks of \$100.00. It is likely that this same recipient will continue to need assistance for the rest of his life and we suggest that it be continued.

A detailed report for 1963 is listed below. A supplementary report will be made at the House of Delegates Meeting in May.

(See Page 137)

News

Dr. Dufford

Dr. C. A. Dufford, Jr., was guest speaker at the January meeting of Pre-School Mothers' Club, Group I, in Newberry.

Loris Community Hospital Granted Accreditation

Accreditation for a full three years was awarded the Loris Community Hospital following a survey conducted by the Joint Commission on Accreditation of Hospitals.

Dr. Floyd Griffin

Dr. Floyd Griffin, Jr. of Greenville recently joined the Greenville County Maternity Shelter Hospital as resident doctor.

Dr. D. O. Royals

Dr. D. O. Royals, Westminster, has accepted a residency in orthopedic surgery at the Mayo Clinic.

Dr. Royals expects to move to Rochester around the first of July and expects to remain there for four years.

Dr. J. O. Fulenwider

Dr. J. O. Fulenwider, Jr. of Pageland, was named
(See Page 140)

BENEVOLENCE FUND

(Continued from Page 136)

BALANCE ON HAND JANUARY 1, 1963 ----- \$ 815.00

Receipts 1963:

10-24-62	Appropriated by Association	\$1,000.00
1-14-63	Lancaster County Auxiliary	10.00
2-22-63	York County Auxiliary	25.00
1-22-63	Newberry County Auxiliary	5.00
3-19-63	Greenville County Auxiliary	100.00
3-26-63	Spartanburg County Auxiliary	25.00
3-26-63	Sumter County Auxiliary	10.00
3-28-63	Pee Dee County Auxiliary	75.00
4-20-63	Columbia County Auxiliary	50.00
5- 1-63	Barnwell County Auxiliary	10.00
5-13-63	Oconee County Auxiliary	5.00
5-20-63	Anderson County Auxiliary	50.00
9-30-63	Charleston County Auxiliary	92.50
10-23-63	Oconee County Auxiliary	5.00

1,462.50

Total ----- \$2,277.50

Disbursements:

Recipient A—10 months @ \$100.00 ----- 1,000.00

BALANCE ON HAND JANUARY 1, 1964 ----- \$1,277.50

Charles J. Lemmon, Jr.

Harold S. Pettit

Thomas G. Goldsmith, Chairman

In rheumatoid arthritis... the 'right' steroid

Dexameth^{*}
BRAND OF **Dexamethasone**
TABLETS 0.75 mg.

CLINICAL EXCELLENCE...

AT SUBSTANTIALLY REDUCED COST TO THE PATIENT

unsurpassed antirheumatic activity DEXAMETH (dexamethasone) is "the most powerful antirheumatic glucocorticoid yet synthesized."¹ It exerts a prompt and potent ameliorating effect in patients with rheumatoid arthritis;² symptoms of inflammatory reaction are quickly suppressed in a substantial proportion of patients, joint stiffness is relieved and function improves.

lower tendency to produce undesired effects DEXAMETH (dexamethasone) is less likely than most other steroids to produce electrolyte imbalance, hypertension, and disturbance in carbohydrate metabolism. Abnormal weight gain may limit the usefulness of the drug in some patients, but may be advantageous in others.

unusually economical therapy DEXAMETH (dexamethasone) is available at significantly lower cost than many analogous steroids. It is therefore particularly useful for arthritics and other patients whose financial resources are burdened by chronic, incapacitating disease.

product profile—DEXAMETH (dexamethasone) is a glucocorticoid with outstanding anti-inflammatory and antiallergic activity. At therapeutic dose levels, it may have less tendency to cause sodium or water retention, potassium excretion, disturbance in glucose metabolism or hypertension than some of the older steroids. With these exceptions, however, the drug may give rise to the metabolic and hormonal side effects characteristic of corticoids. It should therefore be used with great caution in the presence of tuberculosis and other infections, osteoporosis, peptic ulcer, fresh intestinal anastomoses, diverticulitis, thrombophlebitis, herpes simplex, psychotic tendency, pregnancy and in persons exposed to chickenpox, measles or scarlet fever. It is contraindicated in ocular herpes simplex, arthritis complicated by psoriasis, tuberculosis of the eye and skin, fungal keratitis, and local pyogenic infection. Before prescribing, consult product brochure.

Dosage: In rheumatoid arthritis, the initial daily dosage ranges from 2 to 4 tablets (1.5 to 3.0 mg.). The dosage is then decreased gradually to the minimum that will maintain sufficient relief; this may be as little as 1 tablet (0.75 mg.) per day. After extended therapy, it is especially important that the drug be withdrawn gradually to allow recovery of normal adrenal function.

1. Boland, E. W.: J.A.M.A. 17:835 (Oct. 15) 1960. 2. Black, R. L., et al.: Arthritis and Rheumatism 3:112 (April) 1960.

U. S. VITAMIN & PHARMACEUTICAL CORP., 800 SECOND AVE., N.Y. 17, N.Y.

*Trademark

Patient:
56-year-old woman with generalized rheumatoid arthritis of 7 years' duration.
X-ray: Skin prepared with barium sulfate; tube distance 36 inches, 50 ma. sec. at 40 kv.; no screen.

EXHIBITORS

The Stuart Company

A cordial invitation is extended to all members and guests attending this meeting to visit the Stuart Company booth. Specially trained representatives will be in attendance to answer your questions on new products, developed in our modern laboratories, which have particular interest for the medical profession. Products featured are MYLANTA, STUART PRENATAL-F, MULVIDREN-F and MULVIDREN JUNIOR.

Breon Laboratories, Inc. Booth #35

You are cordially invited to visit the Breon exhibit. Our professional representatives in attendance welcome your questions about Breon Specialties: BRONKOMETER, BRONKOTABS, BRONKOTAB ELIXIR and DIAPARENE ANTIBACTERIAL BABY PREPARATIONS.

Carnation Company

Carnation Company cordially invites you to visit Booth #24, where its representatives will be pleased to welcome members and guests of the South Carolina Medical Association.

Recent literature and information regarding Carnation Evaporated, Carnation Instant Non-Fat and Carnalac New Formula are available.

Any question pertaining to our physician-researched material for use in your practice or hospital will be cheerfully discussed.

The Lanier Company

Gray Audograph and Stenocord Dictation Systems . . . desk and portable dictating units and remote networks designed for medical offices and hospital usage.

Carri-Voice . . . Battery-operated PA system and lectern.

Palmedico, Inc.

Palmedico, Inc., South Carolina's own Pharmaceutical House contributing to the growth and development of the Palmetto State, extends best wishes for a wonderful convention. Please stop by Booth #5 to see us. We will be featuring AMPHAPLEX—unique for weight control; PALOHIST—a triple antihistamine with nasal decongestant—the MOST and the BEST your patients' prescription money can buy. Also PRORENATA will be available at the booth in the event you should have "a friend" who has a hangover.

A. H. Robins Company, Inc.

Welcome to the Convention, Doctor, from the A. H. Robins Company.

We hope you can stop at our display for a moment. The representatives there will be happy to answer any questions you may have about our products and explain their advantages.

The Wm. S. Merrell Company

Merrellmen always have an up-to-date status report on Merrell's significant prescription products. They will be happy to convey latest clinical reports to you in summary form when you visit the Merrell booth.

Health Insurance Council

The Health Insurance Council, representing the voluntary health insurance business, will display pamphlets and other available material on the subject of health insurance. The exhibit will emphasize the role of physicians in increasing the effectiveness of voluntary health insurance for their patients in the public interest. Information about the Council's Uniform Forms Program will also be available.

Pet Milk Company

Our representatives will appreciate the opportunity of discussing with you SEGO Liquid Diet Food and the unique 'Four Phase SEGO Diet Plan'. In addition, we are featuring the 'Pet Diet File' providing information on ten special diets, including two pregnancy diets. Patient education and prescription material on Pet Evaporated Milk for infant feeding is available also.

Merck Sharp & Dohme

The theme of the Merck Sharp & Dohme exhibit is "SERVICE TO MEDICINE." One phase features the details of the Merck Sharp & Dohme Postgraduate Program. Another feature includes information on teaching films for use by the profession and, also, lay films that can be utilized to portray the story of medicine to the lay public. The exhibit is concluded with a display of finger-tip files on selected Merck Sharp & Dohme products.

Winchester Surgical Supply Company "Carolinas' House of Service"

It has been our privilege and pleasure to exhibit at the South Carolina Medical Society for forty-four consecutive years. We invite you to visit our exhibit, Space No. 36. Emory L. Floyd, J. Ray Jackson and R. M. Conder will be there to greet you.

Diet Rite Cola America's Number 1

You are invited to drop by the Diet Rite Cola booth for a sample of Diet Rite Cola.

Ciba

ESIDRIX-K® (hydrochlorothiazide and potassium chloride CIBA)

This exhibit will enable the CIBA representative to discuss the importance of potassium in normal physiology, the clinical symptoms of potassium depletion, especially resulting from the administration of a diuretic, and a way to obviate this problem effectively and conveniently with ESIDRIX-K.

U. S. Vitamin & Pharmaceutical Corp.

D B I — "broad-range" oral hypoglycemic agent. D B I, brand of phenformin (N¹-B-phenethylbiguanide HCl) is distinctly different in chemical structure and physiologic action from the oral hypoglycemic sulfonylureas. It effectively lowers blood sugar and eliminates glycosuria in mild, moderate and severe diabetes. D B I, in combination with insulin, improves regulation of "brittle" adult and juvenile diabetes. In juvenile diabetes, D B I often permits up to 50% reduction in the insulin requirement. Also effective in the insulin-resistant, and in primary and secondary tolbutamide and chlorpropamide failures. Full details available.

Arnar-Stone Laboratories, Inc.

Charles C. Haskell Division

See the new AMERICAINE aerosol — 20% dissolved benzocaine — which sprays right side up or upside down for relief of surface pain and itching. Also in ointment form. QUINETTE — the vaginal insert with disposable "pink pencil" inserter for 36 hour control of symptoms — 12 day treatment — in mixed or monilial vaginal infections. METALEX — anabolic, respiratory and circulatory stimulant-vasodilator combination for treatment of symptoms of advancing age and certain auditory and visual defects.

X-Ray Service Company

We will exhibit X-Ray Equipment presently being Manufactured by Dynallectron Corporation, Mattern X-Ray Division, Lake City, South Carolina. We will also show Sanborn electrocardiographic equipment as manufactured by Sanborn Company, Waltham 54, Mass.

Hawthorne Aviation

A representative of Hawthorne Aviation will be on hand in Space 13 at all times. Descriptive literature will be available.

Columbia Brace Shop

You are invited to visit Space 23 to see our exhibit of orthopedic braces, special supportive shoes and cervical and pelvic traction kits.

Sealy of the Carolinas, Inc.

You are cordially invited to see our display of the Sealy Posturepedic innerspring and foam rubber mattresses and the new Sealy Posturepedic innerspring in quilted fashion.

Mead Johnson Laboratories

The Mead Johnson Laboratories' exhibit has been arranged to give you the optimum in quick service and product information. To make your visit productive, specially trained representatives will be on duty to tell you about their products.

Wallace Laboratories

The representatives of Wallace Laboratories will

be glad to discuss the tranquilizer, 'Miltown'. 'Miltown' is proven for relieving both anxiety and tension. In addition, the drug acts as an interneurohal blocking agent at the spinal cord providing effective relief of muscle spasm. 'Miltown' is available in 200 mg and 400 mg dosage strengths and also as 'Meprospan', a 200 mg and 400 mg prolonged release capsule, and 'Mepro tabs', a 400 mg coated tablet.

Schering Corporation



Schering Corporation welcomes the members of the South Carolina Medical Association. We cordially invite you to visit the Schering booth where representatives will be on hand to discuss with you the most recent advances in the SCHERING ALLERGY THERAPEUTIC AREA.

Wm. P. Poythress & Co.

Mudrane, established Poythress combination for relief of bronchial asthma, and its new companion product, Mudrane GG, will be featured at the Poythress exhibit booth, #32. Trocinate, distinctive direct-acting antispasmodic, Synirin, Solfoton, Solfoferpine, and Panalgescic will also be exhibited. Your requests for descriptive literature, reprints and professional trial quantities are cordially invited. Mr. D. N. Patterson will be our staffing representative.

AAPS

The Association of American Physicians and Surgeons' exhibit is made up of posters and blow-ups of cartoons which describe and depict some of the many problems confronting the American medical profession and, also, how the Association is helping physicians to meet them.

Pamphlets giving the background, principles and objectives of the Association and its program of services to physicians are available at the exhibit.

Organon, Inc.

You are cordially invited to visit our exhibit at booth #19. Of particular interest: Hexadrol (dexamethasone) — one of the newer corticosteroids, Deca-Durabolin (nandrolone decanoate) — a long-acting anabolic agent. Our professional service representatives welcome the opportunity to answer your questions concerning Hexadrol (dexamethasone), Deca-Durabolin (nandrolone decanoate) or any of our other preparations.

Geigy Pharmaceuticals

Geigy Pharmaceuticals cordially invites Members and Guests of the Association to visit its exhibit. The exhibit features important new therapeutic developments in the management of cardiovascular disease as well as current concepts in the control of inflammation; hypertension and edema; depression; obesity, and other disorders, which may be discussed with representatives in attendance.

News

(Continued from Page 136)

a member of the advisory committee of the University of Virginia Medical Alumni Association which held its organizational meeting in Hot Springs, Va.

Dr. Fulenwider received his medical degree from the University in 1936.

Dr. Russ Howell

Dr. Russ Howell of Latta was recently elected president of the Dillon County Unit of the American Cancer Society.

Doctors as Speakers

Dr. B. M. Montgomery was guest speaker of district nine, South Carolina State Nurses Association, held in the conference room of Newberry County Memorial Hospital, January 28.

The hazards of smoking was the topic of a program presented last week to the student body of Ashley Hall by Dr. John C. Hawk, Jr. of Charleston.

New developments in science and medicine were discussed as the Florence chapter of the American Association of University Women heard talks by two professionals in Florence. Dr. N. B. Baroddy, specialist in internal medicine, discussed developments in medicine in 1963. A Du Pont engineer, Dr. Robert M. Currie, talked of the "Quiet Revolution in Science."

Darlington County Medical Association

Dr. Joe S. Matthews, III has been elected president of the Darlington County Medical Association for the current year.

Other officers to serve during 1964 are vice-president Dr. J. L. Suggs of Hartsville and secretary-treasurer Dr. John M. Wilson.

Dr. B. F. Timmons was elected a delegate to the state convention with Dr. C. E. Aimar as alternate.

Dr. D. B. Gregg

Dr. David B. Gregg has resigned as medical director of Pinehaven Hospital in Charleston to accept a position with the S. C. State Board of Health in Columbia.

He will be health officer in the chronic disease section, working with tuberculosis, cancer and heart.

Dr. Gregg has been associated with the tuberculosis hospital in Charleston since 1944 and has been medical director since 1955.

Dr. Charles I. Goodwin

A 50-year pin was presented to Dr. Charles I. Goodwin of the Edisto Medical Society.

Dr. Timmons Is Elected

Dr. Barney F. Timmons was elected president of Hartsville United Fund at the annual meeting.

Dr. Rogers Joins Dr. E. A. Jamison

Dr. E. A. Jamison and Dr. Dexter B. Rogers have associated in the general practice of medicine at 517 W. Main St., Easley, at the Doctors Clinic.

Dr. Hanna Addresses AP News Council

Dr. Charles Hanna of Spartanburg discussed "Medicine and the Press" at the South Carolina Associated Press News Council's recent meeting in Columbia.

Symposium On Heart Disease Held

The South Carolina Heart Association in cooperation with the Third District Medical Association presented a symposium on Coronary Artery Disease Sunday, February 16, at Self Memorial Hospital.

Dr. J. S. Evans

Dr. John Steed Evans, formerly of the Department of urology at Yale University, has recently joined Drs. Nachman, Armstrong and Smith in Greenville.

A native of Murfreesboro, N. C., he was graduated from the Virginia Military Institute in 1951 and Duke University School of Medicine in 1958.

Tri-State Medical Assn.—Annual Meeting

June 8th, 9th, 10th, (Mon., Tues., Wed.)

Carolinian Hotel, Nags Head, N. C.

Hill-Burton Construction Contract Awarded

The U. S. Public Health Service through the State Board of Health has authorized the awarding of a construction contract for a rehabilitation center at Whitten Village in Clinton.

This project is estimated to cost \$543,945 with a federal share of \$362,630.

Drs. Ball and Allison Present Papers At Houston VD Seminar

Dr. R. W. Ball, Chief of the Venereal Disease Control Section, and Dr. J. Richard Allison, Jr., Clinician, presented papers at the Venereal Disease Seminar held in Houston, Texas, January 21 - 23. Dr. Ball's subject was "Implications for Program Based upon Results of Physician, Hospital, and Laboratory Reporting Surveys." Dr. Allison talked on "Clinical Interpretation of Laboratory Tests in the Management of Syphilis" and participated in a panel discussion entitled "Management of Syphilis."

Trauma Symposium for Lawyers

A symposium on trauma is being sponsored for lawyers by the Charleston County Medical Society and the Young Lawyers Club. The lectures are being held on Monday evenings at 8:00 p. m. in the Medical College Hospital amphitheater through March 23. Lecturers include Drs. Louis P. Jervey, Julian

R. Youmans, C. Ford Rivers, Jr., B. Lynn Freeman, and Dr. George H. Orvin.

Columbia Rheumatoid Arthritic Clinic

The Columbia Rheumatoid Arthritic Clinic has been established for the purpose of expanding the present adult arthritic clinic to include children under 19 years of age. Adequate consultational services will be provided to physicians on a state-wide basis for diagnosis, evaluation, and future patient management. Limited funds are available for hospitalization. Adequate clinical space, laboratory facilities, secretarial services, nursing and physiotherapy are available. Internal medical and orthopedic consultation by Dr. E. W. Masters and Dr. David Holler will be available as needed.

The prime interest of the clinic is for evaluation and diagnosis of rheumatoid arthritis; however, we feel that additional services can be rendered to those patients having or suspected of having collagen type diseases.

No special restrictions regarding geographic location, race, color, residence or financial status will be made. If funds are available for patient care other than that of the National Foundation, these funds are to be utilized.

Application for appointment along with clinical data should be made to the clinic by the family physician. The clinic is conducted from 9 a. m. to 12 noon the first Thursday in each month. Referral must come from the patient's physician. A comprehensive report to the physician will be made by the clinic director.

This is a state-wide program which we feel is necessary to provide comprehensive care to the patient with rheumatoid arthritis without restrictions of financial barriers, race, etc. Our main concern is to establish the correct diagnosis and to evaluate the patient for long term management with the ultimate aim of reducing the crippling effects of arthritis.

Correspondence should be directed to:

Belton D. Caughman, M. D.
Rheumatoid Arthritic Clinic
Columbia Hospital
Columbia, S. C.

Poison Control Centers

A new wallet size card listing the telephone numbers of the two Poison Control Centers in South Carolina has been distributed.

The purpose of these centers is to supply information to physicians regarding chemical composition, potential toxicity and therapy of poisoning by the limitless number of household products surrounding the average family. It is hoped that the reference file of these centers will give the doctor ready information on thousands of products enabling him to give immediate and specific treatment thus lowering the crippling and mortality rates of children.

Forms concerning clinical and follow-up data on each case will be mailed for completion to physicians receiving information. Your cooperation in returning these will be greatly appreciated.

The services of these centers is provided through the cooperation of the South Carolina State Board of Health, The State Chapter of the Academy of Pediatrics and the respective hospitals.

Coastal Medical Society

The Coastal Medical Society met Thursday, February 20, 1964, at the Edisto Restaurant, Jacksonboro, S. C. Dr. Stuart Richardson spoke on "Recent advances in Thrombocytopenic Purpura."

Dr. Riley To Practice In Columbia

Dr. John W. Riley, general practitioner, has announced the opening of his medical office at 1412 Bull St. in Columbia.

Dr. Riley, a native of Columbia, was educated at the University of South Carolina and the Medical College of South Carolina.

At the medical college, he was a member of the Alpha Kappa Kappa fraternity.

Dr. J. M. Symmes

Dr. James Marion Symmes, 79, retired physician who had practiced medicine in Greenwood many years, died January 13, in a Columbia hospital.

Dr. Symmes, who spent some of his youth in St. Matthews, first practiced medicine at Rowesville in Orangeburg County and briefly at Donalds before moving to Greenwood in 1915. He attended Clemson College and was graduated in Pharmacy from the S. C. School of Pharmacy in 1908, and then entered the Medical College at Charleston and was graduated in 1912.

Dr. Symmes was a member of the Phi Chi Medical Fraternity. He was an honorary member of the Greenwood County, State and American Medical Societies.

W. B. SAUNDERS COMPANY features

the following new books and new editions in their full page advertisement appearing elsewhere in this issue:

AVERY — THE LUNG AND ITS DISORDERS IN NEWBORN INFANTS

New! — The first of a projected series of monographs on individual topics in Pediatrics. Covers all aspects of each subject.

CECIL - CONN — THE SPECIALTIES IN GENERAL PRACTICE

New (3rd) Edition! — The general practitioner's guide to those special conditions he can handle himself.

STODDARD — CASE STUDIES IN OBSTETRICS AND GYNECOLOGY

New! — Sixty case problems give you a wealth of medical information. A veritable treasure-trove of practical, clinical advice.

MINUTES OF COUNCIL SOUTH CAROLINA MEDICAL ASSOCIATION

(Special Call Meeting) — February 16, 1964

This special meeting of Council was called by Dr. A. F. Burnside, Chairman. The meeting was held in the Board Room, Columbia Hotel, Columbia, South Carolina, 4:30 P. M., Sunday, February 16, 1964.

The meeting was called to order by Dr. A. F. Burnside. The following were present: Dr. Robert Wilson, Dr. Frank C. Owens, Dr. Asbury C. Bozard, Dr. J. Howard Stokes, Dr. Joe Waring, Mr. M. L. Meadors, Dr. Ben N. Miller, Dr. Clay W. Evatt, Dr. A. F. Burnside, Dr. C. J. Scurry, Dr. John P. Booker, Dr. John M. Pratt, Dr. William L. Perry, Dr. Norman O. Eaddy, Dr. Joseph D. Thomas, Dr. John M. Fleming, Dr. George Dean Johnson, and Dr. Joseph P. Cain.

The first order of business was to hear Dr. James H. Gressette, Chairman of the Special Committee on Nursing Education. This report is recorded as a part of the minutes as follows:

Report of The Special Committee on Nursing Education

The Association's Special Committee on Nursing Education held a joint meeting with the Committee on Nursing of the Board of Trustees of the Medical College of South Carolina at 3:00 o'clock on the afternoon of Tuesday, December 10, 1963, in the Columbia Hotel, Columbia, South Carolina.

Present for the Special Committee on Nursing Education of the South Carolina Medical Association were: Dr. James H. Gressette, Chairman, Dr. Buford S. Chappell, and Dr. Henry C. Robertson.

Present for the Committee on Nursing of the Board of Trustees of the Medical College were: Dr. A. F. Burnside, Dr. John M. Pratt, and Dr. Lawrence Thackston.

This meeting took place in conformity with the wishes of the Council, which had requested that the two groups confer, that a study be made of the report on nursing by the Committee of the Board of Trustees and of the report by the Governor's Special Committee on Nursing, and that our Committee make specific recommendations to Council.

A general discussion of these reports ensued, after which the Special Committee on Nursing Education of the South Carolina Medical Association met and recommendations were made under the general headings of: (a) Improved Nurse-Doctor relationships; (b) Nursing Education; (c) Examining Boards.

(A) Improved Nurse-Doctor Relationships

1. It is recommended that better liaison be established between the nursing and medical professions by a joint committee with continuity. This committee could be appointed by the Executive Board of the State Nurses Association and by Council of the State Medical Association with staggered

terms. Communications between the two professions at all levels is desirable.

2. It is recognized that the doctor is responsible for the patient's care and that the nurse is an indispensable member of the team to provide medical care for the patient. She, being a member of the team with the doctor, is responsible for carrying out the orders and instructions in the patient's care.

(B) Nursing Education

1. Recognizing that a nursing shortage exists and that more nurses are needed, it is felt that the "degree school of nursing," while commendable in limited degree, cannot be expected to fill the gap in the nursing shortage.

2. It is recommended that better relationships be established between the "working nurse" and the "academic" nursing staff.

3. It is recommended that the doctors teach the principles of disease and their treatment to student nurses and that the nursing staff continue to teach the principles and techniques of nursing.

4. It is recommended that doctors actively participate in formulation of the nursing school curricula.

5. It is recommended that doctors *actively* and *willingly* cooperate and accept responsibilities of training and teaching and counselling of nurses and student nurses.

6. It is recommended that doctors and nurses actively cooperate in expanding the teaching of practical nurses.

7. It is recommended that the state provide supplementary funds so that the individual hospitals may not be required to bear the costs of the "diploma schools."

8. It is recommended that the South Carolina Medical Association look into the accreditation of hospitals in the area of patient nursing care, institutional and private.

(C) Nurses Examining Board

1. It is recommended that the board for examining and licensing nurses in South Carolina be changed so that the board be constituted of four nurses and four doctors and that a nurse be made Chairman of this board."

Discussion of the report was opened by Dr. Clay W. Evatt, who commented on the use of ancillary help such as practical nurses. He suggested the term "clinical nurse" be used in lieu of the present day connotation of "practical nurse."

At this point, Dr. Robert Wilson interjected a comment on the Committee, Liaison with Allied Professions. He informed Council that Dr. Jervey had asked to be relieved of Chairmanship of this Committee and was replaced by Dr. Keith F. Sanders. Dr. Sanders had reported to Dr. Wilson

unsatisfactory contact with several people in allied professions, and had been rather discouraged in his committee work. Dr. Wilson further commented that he did not feel that Council could resolve this committee, and that Dr. Sanders' reports, comments, etc. should be brought to the House of Delegates.

Returning strictly to the discussion of Dr. Gressette's report, Dr. Johnson moved that the report of the Special Committee on Nursing Education be accepted, and this was seconded by Dr. Evatt. Several points of the report were now discussed by Dr. Eaddy, Dr. Wilson, and Dr. Owens. Questions were answered by Dr. Gressette.

Dr. Cain commented that the initial report by this committee had been received, and now the second report should be studied by Council and ultimately reported to the House of Delegates at the May annual meeting.

Dr. Owens felt that there was much good in the report, but that all items could not be accepted at this time and he, too, felt that the final decision should be left to the House of Delegates.

Dr. Robert Wilson offered a motion to accept the committee's report as information. Dr. Johnson voluntarily withdrew his motion, as did his seconder, and at this point Dr. Frank Owens offered a second for Dr. Wilson's motion. The motion was put and was carried in the affirmative. Dr. Eaddy suggested that this report and action of the special call meeting be put on the agenda for the first day Council Meeting in May at the S. C. M. A. Meeting. Dr. Burnside instructed the secretary to include Dr. Gressette's report in the minutes to be forwarded to various members of Council.

Dr. Burnside directed the secretary to read a communication from Dr. George G. Durst. The body of the letter is recorded as part of the minutes as follows:

"Dear Dr. Burnside:

This Special Committee following its appointment and according to instructions has had several conferences with Dr. Harrison Peeples and other representatives of SCALPEL. The objectives and work of SCALPEL have been studied and the Committee considers this organization to be most worthy of any consideration and assistance that the South Carolina Medical Association can give it.

At its last meeting, the Board of Directors of SCALPEL passed the following resolution:

"That the present Board of Directors of SCALPEL recommend to the Council of the South Carolina Medical Association that all Directors of said organization be appointed by Council of the South Carolina Medical Association and that this Board be composed of two Directors appointed from each Congressional District and two from the Ladies Auxiliary. The term of office shall be for one year and Directors shall be eligible for reappointment."

Comment:

This would work to the mutual advantage of the

South Carolina Medical Association and to SCALPEL, in that:

- 1) It would give SCALPEL recognition and stature that would assist its program of activities and membership drive.
- 2) The power of appointment would enable Council to give supervision and guidance to the program of SCALPEL.

Recommendations:

The Special Committee recommends that Council approve this request from the Board of Directors of SCALPEL. (If approved, so as to be most effective, proper notification should be given prior to March 15th to allow time for SCALPEL to adopt this as a change in its Constitution and By-Laws. This matter of timing is *urgent* as this is a year of National Elections).

The Committee understands that SCALPEL representatives are seeking a time during the next Annual Meeting of the South Carolina State Medical Association when a "SCALPEL Luncheon or Banquet" can be held with some outstanding guest speaker. The Committee recommends to Council that this be permitted and encouraged if an appropriate time can be found.

Other proposed areas of cooperation between the State Association and SCALPEL have been brought to the attention of this Committee. These matters are under advisement and a subsequent report will be submitted.

Your Committee appreciates the confidence of Council and respectfully submits this report."

Signed: George G. Durst, M. D.

The letter was received as information.

Dr. Eaddy asked the Chairman to put him on record as "I would like for the record to show that I think it would be a mistake to get S. C. M. A., as such, involved in any political thing which might be partisan, and I would be opposed to our doing this." At this point, Dr. Peeples commented on the action of SCALPEL, also, on Dr. Durst's communication. He stated that only 20 per cent of the paid members of S. C. M. A. were members of SCALPEL, and he felt that this number should be increased to 50 per cent. Dr. Peeples answered questions directed by Drs. Cain, Johnson, Booker, and others.

Dr. Evatt moved that all Directors of SCALPEL be appointed by Council of S. C. M. A. and that this Board be composed of two directors appointed from each Congressional District and two from the Ladies Auxiliary. The term of office to be for one year and Directors to be eligible for reappointment. This was seconded by Dr. Wilson. This motion was consistent with the request of Dr. Peeples and others responsible for the operation of SCALPEL. Discussion followed by Drs. Cain, Owens, Mr. Meadors, and others. The motion referable to the Directors of SCALPEL was put and carried in the affirmative.

Dr. Peeples now requested that SCALPEL be permitted to have a banquet during the S. C. M. A. annual meeting. He indicated that this would be put

on by SCALPEL without cost to the S. C. M. A. An out-of-state speaker, preferably one recommended by AMPAC, will address the guests.

Dr. Cain moved that Wednesday night, May 6, 1964, 7:30 P. M. to 9:30 P. M. be set aside for the SCALPEL Banquet. This was seconded by Dr. Perry, put and carried in the affirmative.

Dr. James B. Galloway, Chairman of the Committee on Mental Health Legislation gave an informal report to Council referable to the Committee's views on several matters, particularly items of proposed legislation.

Dr. Galloway first commented on the "Proposed Amendments to the Community Mental Health Services and the Interstate Compact Acts," stating that this has been studied by the Committee and they are in complete agreement with the proposed amendments.

Dr. Wilson moved that Dr. Galloway and members of the Committee on Mental Health Legislation arrange to appear at the hearing referable to the proposed amendments in behalf of the S. C. M. A. The motion was seconded by Dr. Fleming. Dr. Cain amended the motion to include that the Executive Secretary and S. C. M. A. Legislative Committee assist in presenting the proposed amendments. The motion as amended was seconded by Dr. Owens, put and carried in the affirmative.

Dr. Galloway reported on a series of thirteen (13) one-half hour radio programs (disc recordings) prepared by outstanding physicians which A. M. A. Department of Mental Health has sent to various radio stations. The South Carolina Mental Health Association wishes to promote this project but in conjunction with the S. C. M. A.

A motion was made by Dr. Johnson that S. C. M. A. endorse this program in conjunction with the Mental Health Association and that this be given the full support of Council. The motion was amended by Dr. Owens to include that approval of the Public Relations Committee be obtained. The motion as amended was seconded by Dr. Fleming, put and carried in the affirmative.

Dr. Galloway commented on the Bill-S-624 which was introduced into the Senate on February 6th by Senators Morris, Timmerman, and Walker, and referred to the Committee on Medical Affairs. He stated that the Committee on Mental Health Legislation felt that there were some conflicts of interest between the South Carolina Mental Health Commission and the South Carolina Hospital Association (under the State Board of Health), particularly about which State Agency would be the one specifically designated to be the Administrator of the federal funds allotted to South Carolina for mental health facilities under Public Law 88-164, known as the "Mental Retardation Facilities and Community Mental Health Centers Construction Act of 1963," and any other federal legislation pertaining to mental health activities.

Dr. Galloway commented on Section 3, under the same Bill S-624, whereby a Board of Regents consisting of five members would be appointed by the Governor upon the advice and consent of the Senate, to serve for a term of five years. The Committee on Mental Health Legislation strongly feels that there should be some representation on the Board of Regents by members of the South Carolina Medical Association.

Mr. Meadors commented on Bill S-624, but did not read the entire Bill. He also agreed that efforts should be made to defer action on the Bill at this time.

Dr. Cain moved that Dr. Galloway and his committee, in view of the conflicting views, arrange a joint meeting with the Mental Health Commission (Dr. Hall and Dr. Beckman); State Board of Health (Dr. George S. T. Peeples); and the S. C. M. A. Legislative Committee, in an effort to defer action on this Bill until some of the problems have been ironed out. The motion was seconded by Dr. Booker, put and carried in the affirmative.

Pending legislation regarding a petition by podiatrists to prescribe drugs and do surgery on the foot up to the metatarsal but not to include the metatarsal was discussed. It was the consensus that this Bill was objectionable.

Dr. Fleming made the motion that Council instruct the Executive Secretary and the Legislative Committee to oppose the Bill with all the things they have in their power to do. This was seconded by Dr. Pratt. This was further discussed by Drs. Burnside and Cain. The motion was put and carried in the affirmative.

Several other legislative Bills were discussed and, as described by Mr. Meadors, all seemed objectionable. Dr. Burnside asked member of Council to contact their Senators and Representatives and exert their influence toward defeating these various petitions.

Dr. Wilson reported that Dr. A. Richard Johnson of St. George, as a member of the Committee on Maternal Health, had requested expense money to attend the A. M. A. Meeting on Maternal Health. It was duly moved and passed by Council that this expense money be permitted.

Dr. Wilson reported on the program for the Annual Myrtle Beach Session.

Dr. Norman O. Eaddy commented on the By-Laws, Page 27, regarding payment of dues from the county medical societies before the delegates may be recognized or permitted to participate in any of the business or proceedings at the State Meeting. No motion was made, and no action was taken.

Dr. Frank C. Owens, Chairman of the Medical Advisory Committee to Selective Service commented on Selective Service doctor requirement for 1964. Possibly twelve (12) doctors will be required from South Carolina.

There being no further business, Dr. Burnside ad-

in virtually all diarrheas...prompt symptomatic control

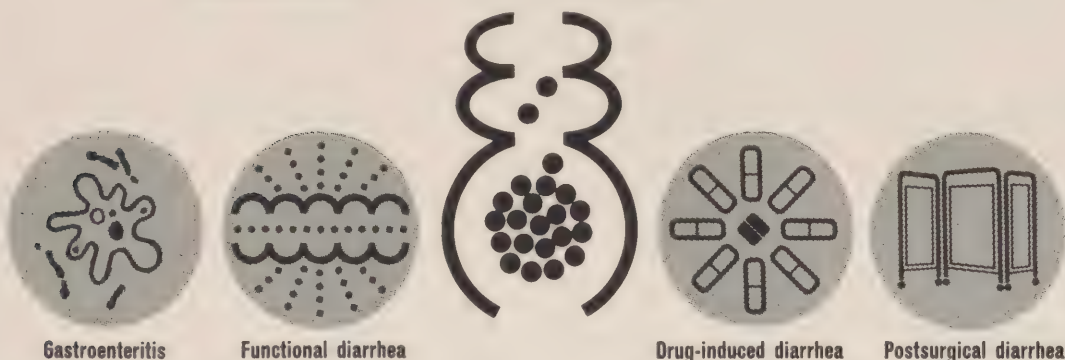
LOMOTIL[®]

TABLETS / LIQUID—Each tablet and each 5 cc. of liquid contains:

diphenoxylate hydrochloride . . . 2.5 mg.

(Warning: May be habit forming)

atropine sulfate 0.025 mg.



Gastroenteritis

Functional diarrhea

Drug-induced diarrhea

Postsurgical diarrhea

Lomotil controls the basic physiologic dysfunction in diarrhea—excessive propulsive motility. Pharmacologic evidence indicates that it does so by directly inhibiting propulsive movements of the intestines. This direct, well-localized activity controls diarrheas of widely varied origin and does so promptly, conveniently and economically.

The relatively few conditions in which Lomotil has given less than satisfactory control have been, for the most part, those such as severe ulcerative colitis in which too little anatomic or functional capacity of the intestines remains for the motility-lowering action of Lomotil to have effect.

It should be noted, however, that Lomotil has proved highly useful in mild to moderate ulcerative colitis and in several other refractory forms of diarrhea.

The recommended initial adult dosage is two tablets (2.5 mg. each) three or four times daily, reduced to meet the requirements of each patient as soon as the diarrhea is controlled. Maintenance dosage may be as low as two tablets daily. *Children's* daily dosage (in divided doses) varies from 3 mg. for a child of 3 to 6 months to 10 mg. for one 8 to 12 years of age. Lomotil is an exempt narcotic; its abuse liability is low and comparable to that of codeine. Recommended dosages should not be exceeded. Side effects are relatively uncommon but among those reported are gastrointestinal irritation, sedation, dizziness, cutaneous manifestations, restlessness and insomnia. Lomotil should be used with caution in patients with impaired liver function and in patients taking addicting drugs or barbiturates. Lomotil is a brand of diphenoxylate hydrochloride with atropine sulfate; the subtherapeutic amount of atropine is added to discourage deliberate overdosage.

Research in the Service of Medicine

SEARLE

joined the meeting at approximately 7:45 P. M.

Dr. Owens submitted a resolution from the Columbia Medical Society regarding the mistreated or battered child syndrome. This was presented after adjournment of Council and it is recorded only for record and for further action.

Resolution

Subject: The Mistreated or "Battered" Child Syndrome

WHEREAS: There exist in South Carolina incidents of babies and children receiving slaps, blows, licks, crushing, and bodily trauma to such an extent that endangers the life and normal development.

WHEREAS: Other states of these United States have passed measures that such incidents may be reported to the police, sheriff, or proper authorities while the physicians or persons reporting this or these maltreatments are not liable for suit provided

they can substantiate that there is mistreatment.

WHEREAS: The parent, parents, any members of the family or guardian might be guilty of this misdemeanor or action by loss of control, drunkenness, or under the influence of a drug.

RESOLVED: That the Columbia Medical Society of Richland County is cognizant of the mistreated or battered child incidents and requests that the Legislature of South Carolina take such action so that:

1. It can be reported promptly.
2. The physician or surgeon reporting the case or cases be protected.

This resolution, as stated, is recorded as a matter of record.

Ben N. Miller, M. D.
Secretary

Book Reviews



ELEMENTARY MEDICAL STATISTICS, by Donald Mainland. 2nd Edition. W. B. Saunders Company, Philadelphia. 1963. Pp. 381. Price \$9.00.

There is little in medicine that does not involve counting or measurement or an estimate or a probability. Every treatment is an experiment — every diagnosis an exercise in probabilities.

Doctors continually face conflicting interpretations of masses of data in their own field and in economics, political science, and other areas. Mainland stresses statistical understanding and thinking while adequately presenting statistical arithmetic. This book is studded with anecdotes illustrating learning by experience: the Case of the Biased Receptionist, the Case of the Intern's Observer, the Case of the Greasy Pigment, the Case of the Infant Rabbits, the Case of the Nth Name, and many more. The first ten chapters are replete with questions and answers applicable to projected, current, or past research. The six later chapters present analytic methods from the investigator's point of view. Highly recommended to all engaged in formal or informal research and to students of medicine of every vintage.

Malcolm U. Dantzler, M. D.

A DOCTOR DISCUSSES PREGNANCY by William G. Birch, M. D. and Dona Z. Meilach, Ph.B. Budlong Press Co., Chicago. 1963. pp. 114. \$1.50.

This small book is a sibling of "A Doctor Dis-

cusses Menopause" and "What Teenagers Want to Know." From the standpoint of cost, convenience, size, and readability this publication, in my opinion, is the best of its kind currently available. It is clearly written to the patient as if the Doctor were talking to her in person. Scientific explanations are sufficiently technical to be accurate but not so much so as to overwhelm the patient. There are many practical points presented, even to what constitutes a sensible telephone call from the patient to her Doctor. The numerous diagrams are simple and pertinent. I would highly recommend this book as a part of obstetrical patient instruction.

J. Richard Sosnowski, M. D.

PROGRESS IN MEDICAL GENETICS, Vol. III., Edited by Arthur G. Steinberg and Alexander G. Bearn. Grune and Stratton, New York and London. 1964. Pp. 266. \$12.25.

The editors have restricted the content of this volume to progress in a few areas of the rapidly expanding field of medical genetics. The chapter on 21-trisomy is a most lucid and informative review of the chromosomal basis for Down's syndrome or mongolism. Since mankind is being exposed to increasing amounts of radiation and to numerous new drugs, it is timely that the book includes excellent discussions on radiation-induced heredity damage and on pharmacogenetics (the genetic basis for different responses to a given drug). Deviate responses to drugs have led to the detection of genetically determined enzyme abnormalities.

Other chapters deal with the genetic code and the role of the code in protein synthesis; the genetics of transplantation antigens in mice, rats, and man; and multifactorial inheritance and human disease.

Elsie Taber, Ph. D.

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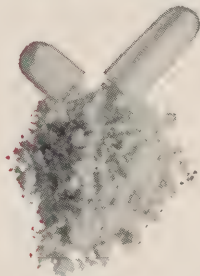
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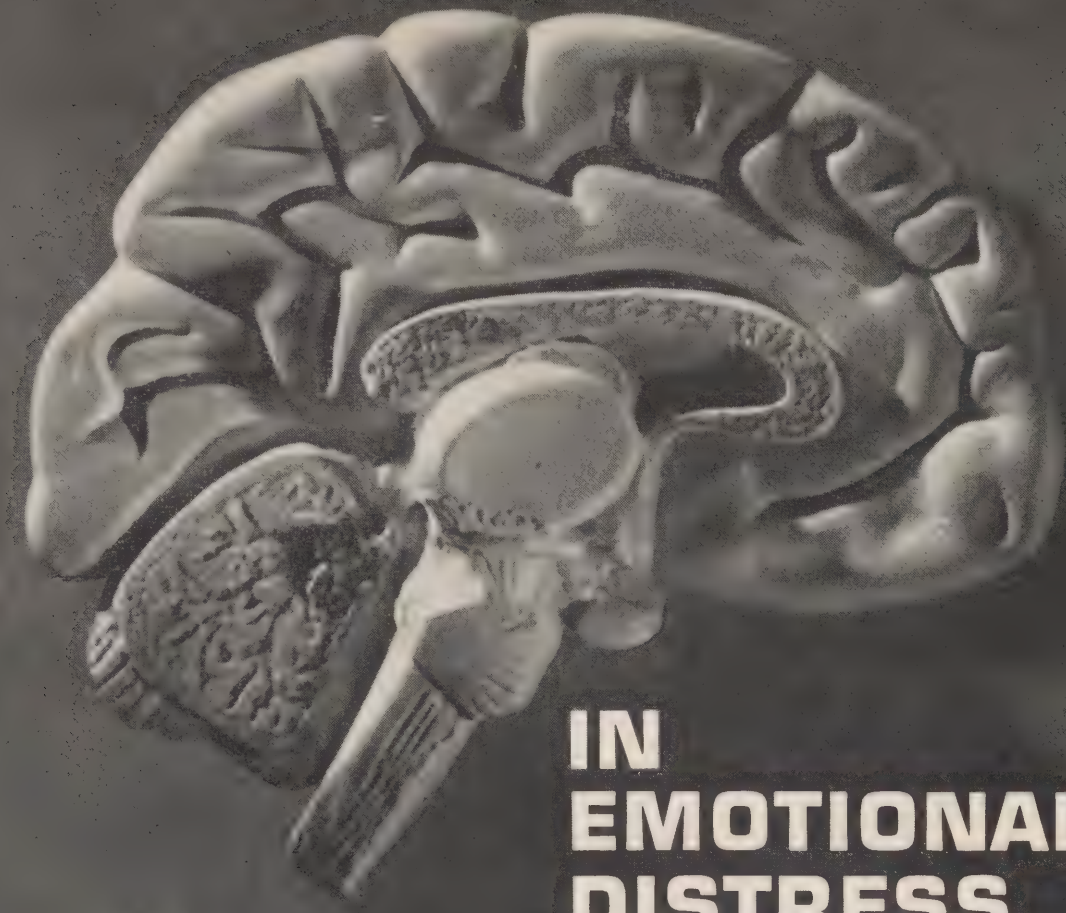
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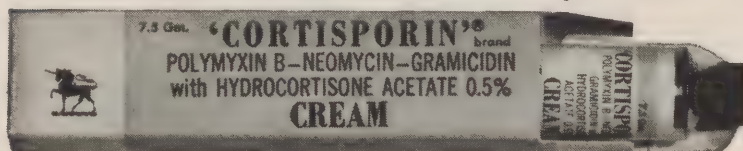
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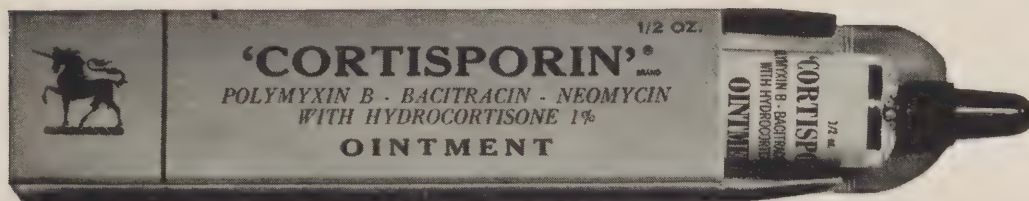
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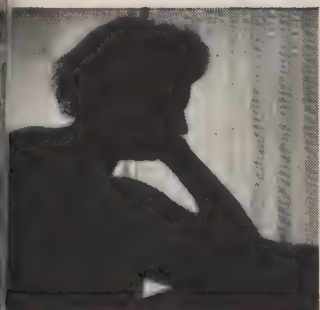
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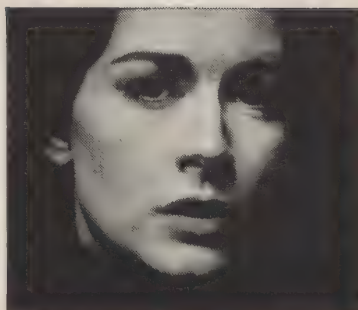
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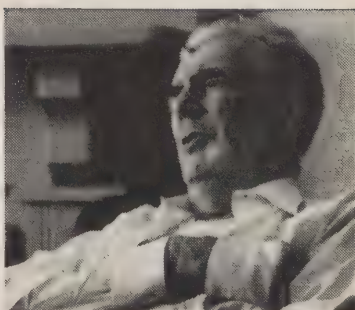
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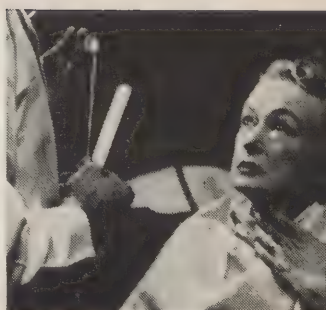
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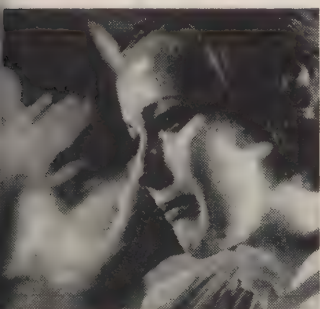
The tense, nervous patient



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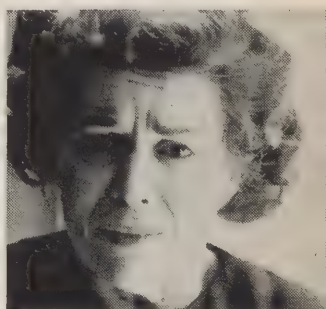
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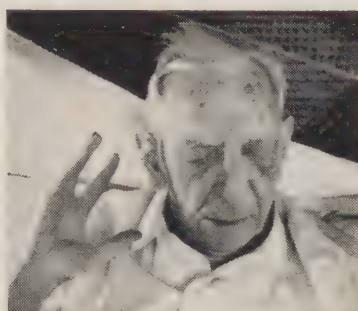
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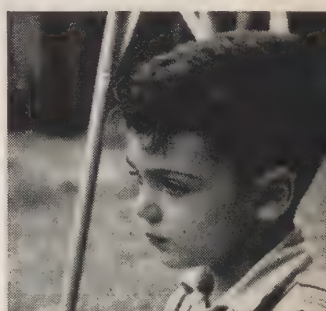
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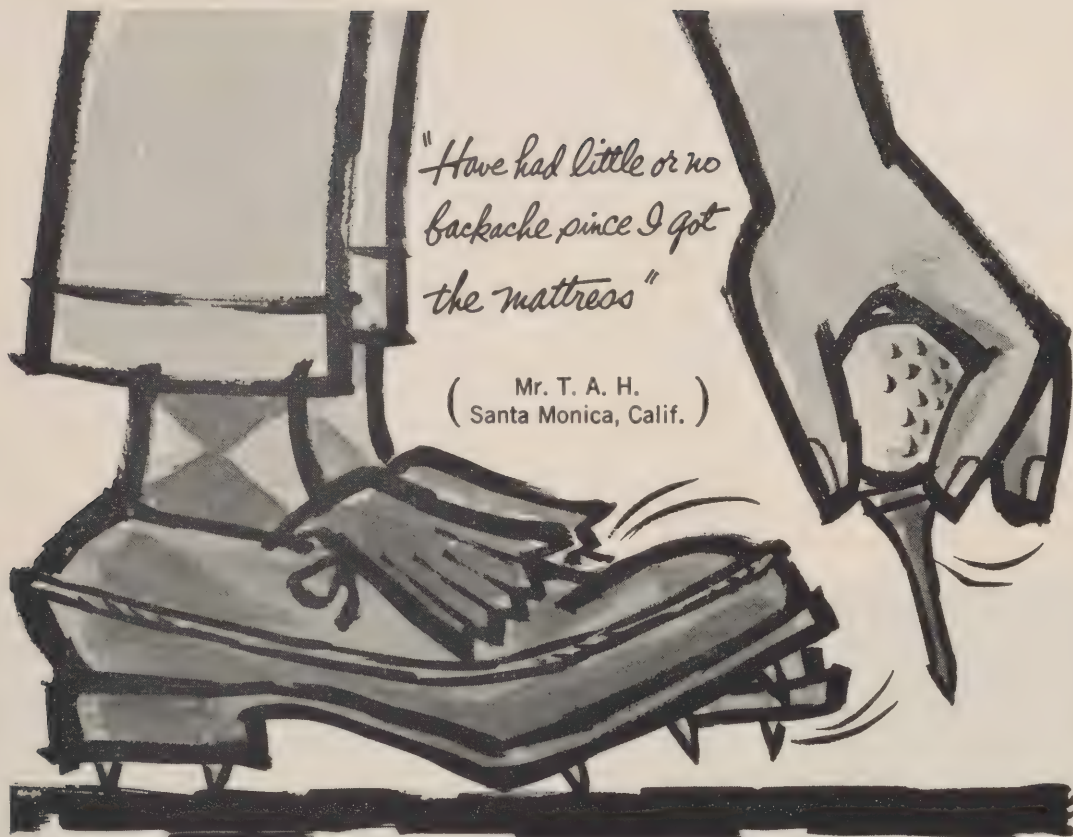
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BRIEF SUMMARY: *Indications:* Depression, especially when accompanied by anxiety, tension, agitation, rumination or insomnia. *Side Effects:* Slight drowsiness and, rarely, allergic reactions, due to meprobamate, and occasional dizziness or feeling of depersonalization in higher dosage, due to benactyzine, may occur. Meprobamate may increase effects of excessive alcohol. Use with care in patients with suicidal tendencies. Consider possibility of dependence, particularly in patients with history of drug

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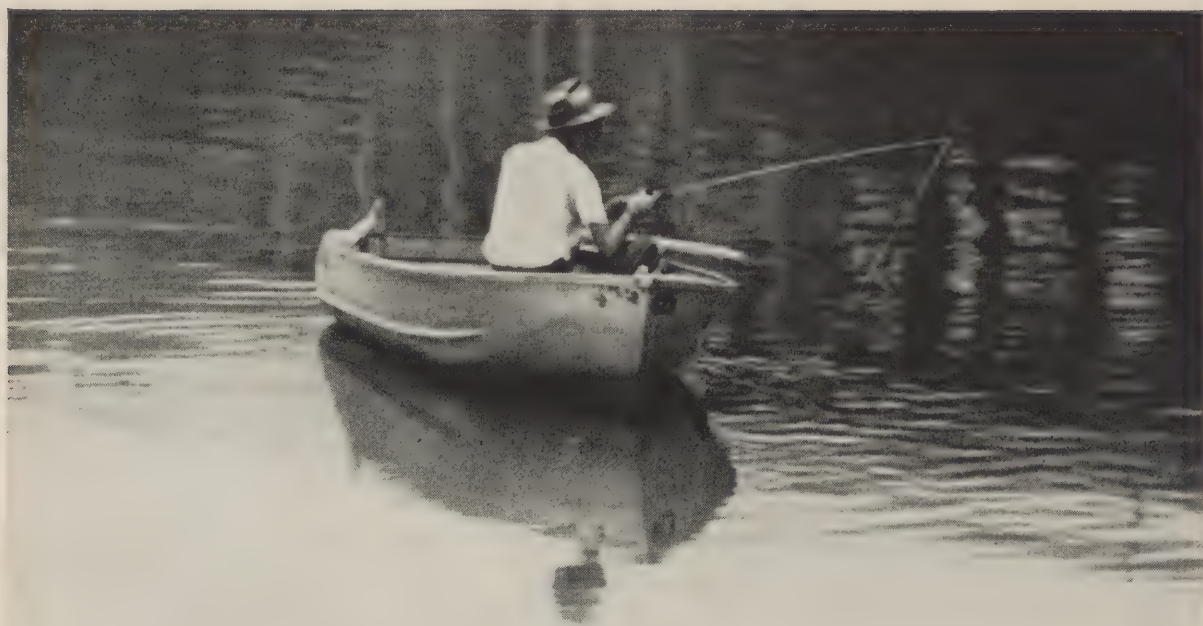
USUAL ADULT DOSAGE: 1 tablet q.i.d. May be increased gradually, as needed, to 3 tablets q.i.d.; with establishment of relief, may be reduced gradually to maintenance levels.

SUPPLIED: Light-pink, scored tablets. Bottles of 50.



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*Roseman, E.: *Neurology* 11:912, 1961.

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Warning: Valium (diazepam) is not of value in dealing with psychotic patients manifesting anxiety and should be avoided when there is reason to believe the patient is psychotic.

Precautions: In elderly or debilitated patients, it is important to limit the dosage to the smallest effective amount to preclude the development of ataxia or oversedation (not more than 1 mg, 1 or 2 times daily initially, to be increased gradually as needed and tolerated). As is true of all CNS-acting drugs, until the correct maintenance dosage is established, patients receiving Valium (diazepam) should be advised against possibly hazardous procedures requiring complete mental alertness or physical coordination. Driving an automobile during the period of Valium (diazepam) therapy is not recommended. In general, the concurrent administration of Valium (diazepam) and other psychotropic agents is not recommended. If such combination therapy is used, careful consideration should be given to the pharmacology of the agents to be employed with Valium (diazepam)—particularly with known compounds which may potentiate the action of Valium (diazepam), such as phenothiazines, barbiturates, MAO inhibitors and other antidepressants.

Since Valium (diazepam) has a central nervous system depressant effect, patients should be advised against the simultaneous ingestion of alcohol and other central nervous system depressant drugs during Valium (diazepam) therapy. Safe use of Valium (diazepam) during pregnancy has not been established. The usual precautions are indicated when Valium (diazepam) is used in the treatment of anxiety states where there is any evidence of impending depression; particularly the recognition that suicidal tendencies may be present and protective measures may be necessary. The usual precautions in treating patients with impaired renal or hepatic function should be observed.

Side effects: In clinical use, fatigue, drowsiness and ataxia have been reported; in most instances these are dose-related and may be avoided by proper dosage adjustment. Mild nausea and dizziness may occur on occasion. As with any new agent, when it is administered for protracted periods of time, periodic blood counts and liver function tests are advisable. Abrupt cessation after prolonged overdosage may, in some patients, produce withdrawal symptoms (e.g., convulsions, tremor, abdominal and muscle cramps, vomiting, sweating) similar to those seen with barbiturates, meprobamate and Librium[®] (chlordiazepoxide HCl). Changes in EEG patterns have been observed in patients during and after Valium (diazepam) treatment.

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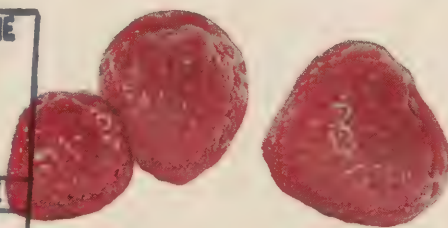
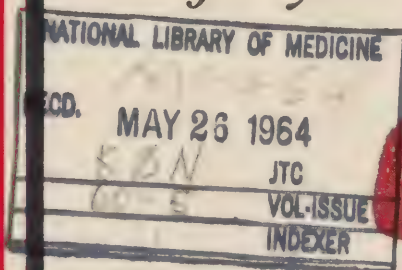
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MAY, 1964 — VOL. 60, NO. 5

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Length—Short articles of about 2,500 words (about 8 typewritten pages, double spaced) are preferred. Longer articles ordinarily will defer to the shorter ones in schedule of publication.

Manuscripts—Manuscripts should be typewritten, double spaced, and the original and a carbon copy submitted.

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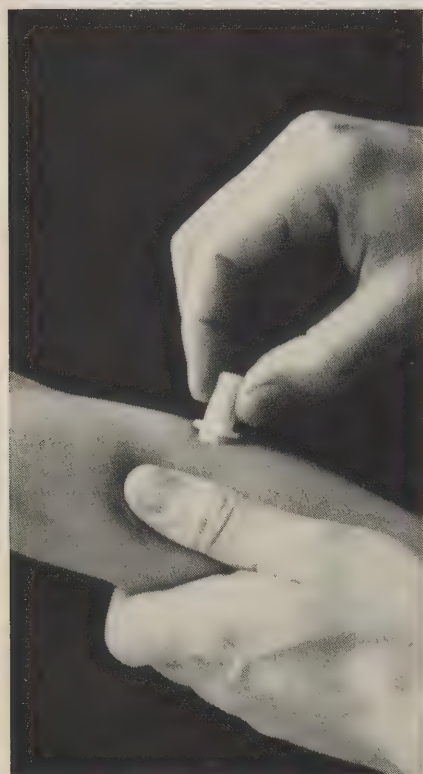
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References: (1) Moyer, J. H., and Heider, C.: *Am. J. Cardiol.* 9:920 (June) 1962. (2) Brest, A. N., and Moyer, J. H.: *Pennsylvania M. J.* 63:545 (Apr.) 1960. (3) Berry, R. L., and Bray, H. P.: *J. Am. Geriatrics Soc.* 10:516 (June) 1962. (4) Hutchison, J. C.: *Current Therap. Res.* 4:610 (Dec.) 1962. (5) Feldman, L. H.: *North Carolina M. J.* 23:248 (June) 1962.

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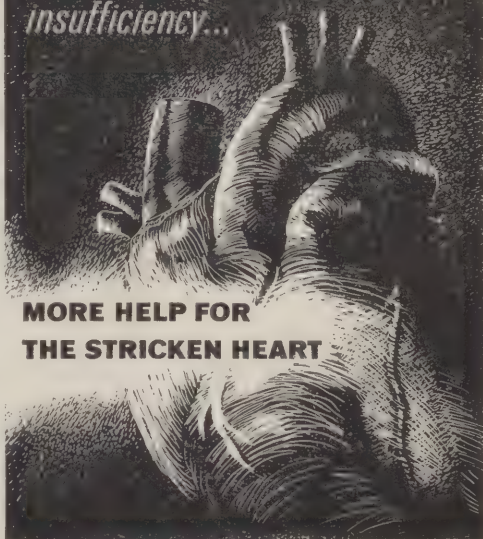


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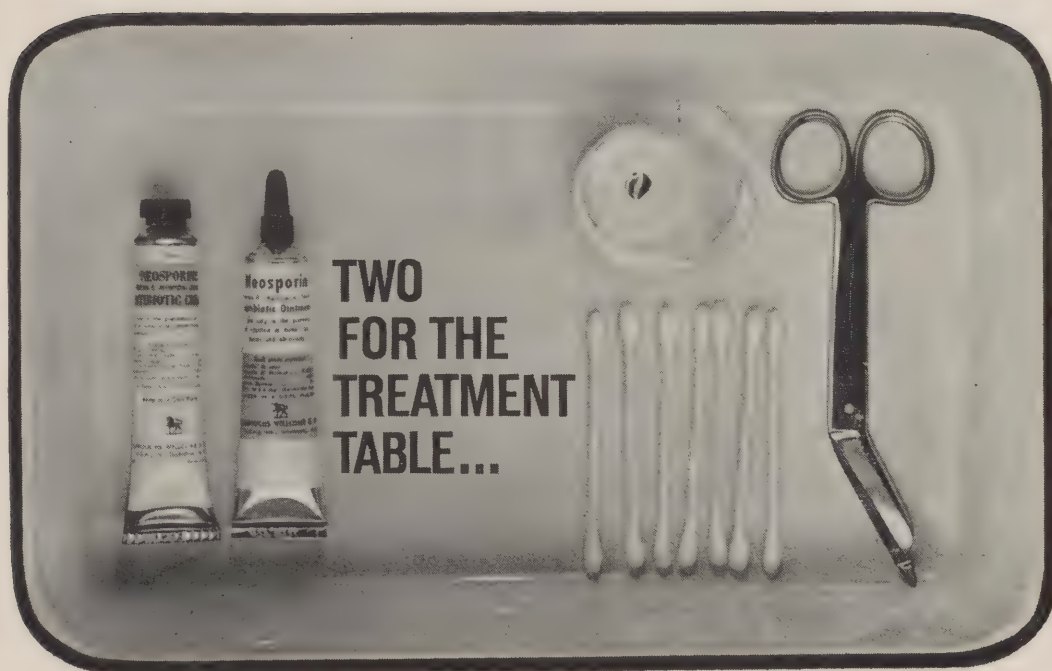
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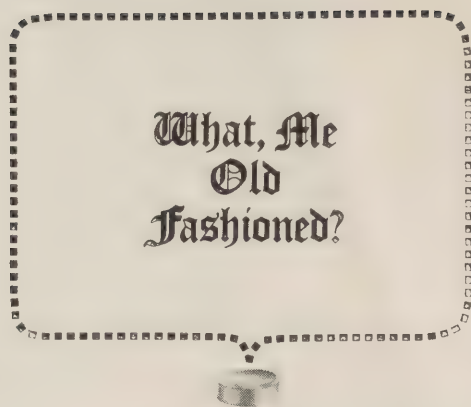
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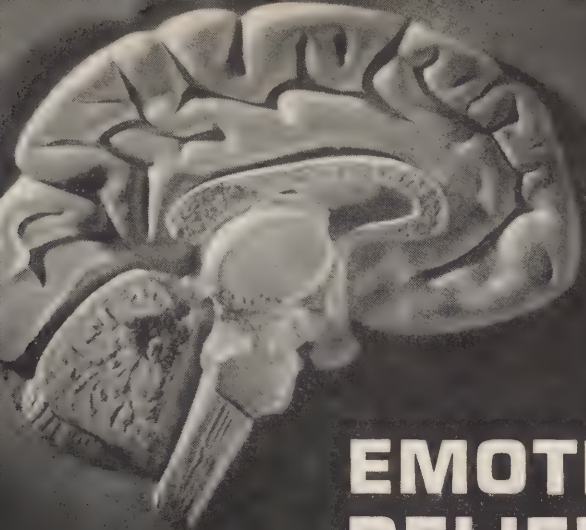


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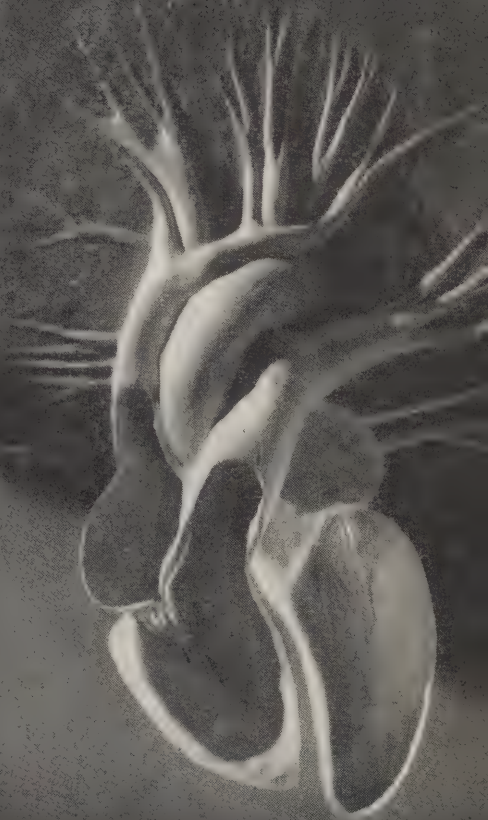
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The Journal

of the

South Carolina Medical Association

VOLUME 60

May, 1964

NUMBER 5

ADULT NEPHROSIS: THE ROLE OF RENAL BIOPSY IN PREDICTING RESPONSE TO CORTICOSTEROIDS¹

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The longterm results of treatment of the nephrotic syndrome in the adult are often discouraging. The response of the adult nephrotic to prolonged oral steroid therapy, whether continuous or intermittent, is not as complete, sustained, or predictable as in children.^{1, 2, 3} The basis for this obvious contrast lies in the dissimilarity of the renal lesions in the childhood and adult forms of the syndrome. The most commonly found renal lesion in children is the so-called "lipoid nephrosis" in which, by light microscopy, only tubular degenerative abnormalities are seen with minimal or no glomerular pathology. In the adult, on the other hand, the nephrotic syndrome may develop as the result of a variety of renal diseases with all gradations in the severity of the anatomical abnormalities.⁴⁻⁵ Renal biopsy provides a direct approach to the evaluation of the renal histology.

In a group of adult nephrotics in whom renal biopsies were performed, an attempt has been made to correlate histologic findings with other clinical data and the response to oral corticosteroid therapy. Because prolonged administration of these toxic drugs in large doses carries with it decided hazards,⁶ any information which enables one to predict accurately the response to such therapy, therefore, is of value to the physician who treats these patients, for it should lend strength to his conviction that the drugs should be used aggressively.

Materials and Methods: This is a retrospective study. Therefore, a rigid protocol was not followed in each case. The patients were admitted to the Medical College Hospital between 1958 and 1963. Those patients with nephrosis from whom a renal biopsy specimen adequate for histological evaluation was obtained at least once were admitted to the study. The patients were treated with oral corticosteroids during their stay except for two whose edema was mobilized while they were on bedrest alone. Prednisone was the steroid most often used. Doses ranged between 20 and 80 mg daily, and most of the patients received 40 to 60 mg daily. The patients have been followed in our clinics or by their private physicians.

Renal biopsies were done percutaneously with a

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TABLE I

CHARACTERISTICS OF COMMONER RENAL LESIONS IN NEPHROSIS

HISTOLOGIC FEATURES

1) Indeterminate Glomerular Lesion	Glomeruli appear normal. No interstitial inflammation. Arterioles normal.
2) Proliferative Glomerulonephritis	Glomeruli swollen, cellular proliferation of stalk and tufts, synechiae to Bowman's capsule. Some glomerular destruction.
3) Membranous Glomerulonephritis	Diffuse, homogeneous thickening of glomerular capillary loops. "Wire-loop" lesion.
4) Mixed Membranous- Proliferative Glomerulonephritis	Combines features of 2 and 3.

modified Vim-Silverman needle and the patients in the prone position. No serious post-biopsy complications occurred in this group of patients. The biopsy specimens obtained were fixed in either formalin or Zenker's solution. After fixation, sections were cut at 3 micra and stained with hematoxylin and eosin, Schiff periodic acid stain, and other special connective tissue stains.

Hematocrit, blood urea nitrogen, urinary specific gravity, qualitative and quantitative urine albumin, serum protein, and cholesterol determinations were performed by standard laboratory procedures. All of the renal biopsies were interpreted by the same observer. The degree of renal damage was estimated on the basis of the total amount of renal tissue destroyed.

Results

Twenty patients are included in this series. Their ages ranged from 12 to 59 years. They are classified in accordance with histological characteristics of the renal biopsy specimens (Table 1). The classification includes indeterminate glomerular disease, proliferative glomerulonephritis, membranous glomerulonephritis, and mixed membranous proliferative glomerulonephritis.⁶ The patients with lupus erythematosus, even though the histologic picture was essentially that of membranous glomerulonephritis, are classified separately because of the special characteristics of this disease. There was one patient with a toxic nephropathy.

Indeterminate Renal Disease: Those patients with no evidence of renal inflammation reflected in the urinary sediment are often classified as having "lipoid nephrosis." Histologically, these patients show little or no glomerular abnormality at magnifications of less than X1000. By electron microscopy, there is a distinct glomerular lesion which consists of

replacement of the foot processes of the podocytes by a continuous layer of epithelial cytoplasm of irregular thickness with discrete breaks in the basement membrane.⁷

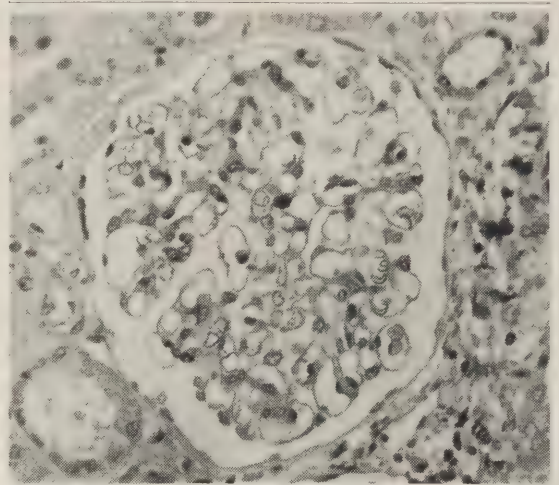


Figure 1. (H X EX400)

Case 1. Table II. An apparently normal glomerulus without evidence of permanent damage. The lack of overt pathologic changes indicates probable steroid responsiveness.

Two patients (Table 2) showed only minor glomerular alterations (Fig. 1). Both of these were normotensive, had excellent renal function, no evidence of glomerular inflammation in the urinary sediment, and clinically presented the fullblown picture of the nephrotic syndrome. Both have responded satisfactorily to steroid administration with complete diureses reflected in weight losses of more than 20 pounds each. Both patients immediately relapsed upon withdrawal of steroids; both responded to readministration of the steroids; and both are now doing well but require maintenance therapy.

Comment

A patient with a combination of florid, clinical nephrosis, normal blood pressure, good renal function, lack of red cells in the sediment, and indeterminate glomerular abnormalities on biopsy can be expected to respond well to the use of oral steroids.

Proliferative Glomerulonephritis: This lesion is characterized histologically by generalized involvement of all glomeruli with varying degrees of proliferation of the endothelial and epithelial cells of either the glomerular tuft or glomerular stalk or both. The glomerulus is often swollen and ischemic with obliteration of Bowman's space. Adhesions to the wall of Bowman's capsule and crescent formation are characteristic of this lesion. Some thickening of the capillary loops may be seen in isolated glomerular tufts, but this so-called "membranous change" is not the pre-

dominant alteration in this entity. This is the subacute glomerulonephritis of older classifications. Arterial alterations are present in varying degree.

Eight of these patients had this lesion (Table 2). A young woman with a convulsive disorder whose nephrosis may have resulted from drug idiosyncrasy experienced a spontaneous remission and has since done well. One man responded well to steroids and did so again a year later after a relapse secondary to a superficial infection. He is also now free of edema. Neither of these patients had either functional or histologic evidence of widespread destruction of renal tissue (Fig. 2). In three others, steroid therapy did not affect the course of the renal lesion. One patient died suddenly while on prednisone. Another became more hypertensive, more edematous, and more azotemic while on prednisone. The

TABLE II

Pt.	Age Race Sex	BP Mm. Hg.	Urine Sp. Gr.	Quant. Urin. Alb. Gm/24 hr.	BUN Mg/ 100 ml.	Clin. Dx.	Estimate of Renal Damage	Path. Dx. & Estimate of Renal Damage	Response to Steroids
INDETERMINATE GLOMERULAR LESION									
R.H.	18WM	130/80	1.027	3.1	12	Nephrotic Synd.	Minimal	Edema of kid., None	Exc. remis. X3 requires maint. steroids
R.W.	50NF	125/85	1.024	5.6	14	Nephrotic Synd.	Minimal	Arteriolarscl., Min. glom. abnormalities	Exc. remis. X2 requires maint. steroids
PROLIFERATIVE GLOMERULONEPHRITIS									
H.P.	21NF	110/70	1.022	10.0	8	Toxic nephrosis	Minimal	Prolif. GN, Moderate	Spontaneous remission
C.H.	28WM	150/100	1.014	8.3	19	Subacute GN with Nephrosis	Moderate	Prolif. GN, Moderate	Exc. remis. X2
D.D.	37WM	146/86	1.025	16.0	28	Subacute GN with Nephrosis	Severe	Prolif. GN, Arteriolarscl., Moderate	None
L.S.	44NF	95/80	1.020		27	Nephrotic Synd.	Moderate	Prolif. GN, Moderate	None, died
F.M.	47NM	110/80	1.016	18.5	34	Subacute GN	Severe	Prolif. GN, Marked	Remis. X3, died uremia
T.W.	42WM	130/90	1.017	11.0	49	Nephrotic Synd.	Severe	Prolif. GN, Arteriolarscl., Interst. Infl., Moderate	None, died uremia
C.C.	54NM	190/120	1.012	6.2	37	Chronic GN	Severe	Prolif. GN, Min. arterio- larscl., Interst. Infl.	None
T.L.	59WM	150/80	1.023	17.0	18	Nephrotic Synd. Pyelonephritis	Moderate	Prolif. GN	None

ADULT NEPHROSIS

TABLE II (Continued)

MIXED MEMBRANOUS - PROLIFERATIVE GLOMERULONEPHRITIS									
L.M.	13NM	150/110	1.011	6.0	8	Nephrotic Synd.	Moderate	Mixed Memb-GN, Moderate	Multiple remissions
H.J.	32WM	140/100	1.021	11.6	10	Nephrotic Synd.	Marked	Mixed Memb-GN, Moderate	Partial
S.K.	53NM	110/70	1.021	3.0	10	Subacute GN	Moderate	Mixed Memb-Prolif. GN, Severe	None
J.S.	55WM	150/100	1.012	3.4	15	Nephrotic Synd.	Moderate	Mixed Memb-Prolif. GN, Moderate	Remission Good
LUPUS ERYTHEMATOSUS									
W.Y.	19NM	145/80	1.017	8.8	18	LE	Severe	Memb. GN, Severe	None
C.H.	20WF	110/90	1.010	2.3	17.0	LE	Minimal	Memb. GN, Moderate	Partial, continuous therapy
D.A.	21NF	110/80	1.015	0.99	10.0	LE	Moderate	Memb. GN, Severe	None, died in uremia
M.R.S.	23NF	110/70	1.008	--	10.0	LE	Severe	Mixed Memb-GN	None, died in uremia
V.J.	32NF	194/100	1.023	14.5	18.0	LE	Severe	Memb. GN, Severe	Deterioration; later spon. remis.
TOXIC NEPHROSIS									
W.S.	40WM	160/85	1.020	18.0	22.0	Toxic Nephrosis	Severe	Tub. Degen., Memb. GN	Min., partial, died in uremia

third experienced some decrease in edema, but renal function continued to deteriorate until he died in uremia.

The next two patients in addition to proliferative glomerulonephritis, showed marked interstitial renal inflammation histologically. The last patient in this group (Table 2) had clinically evident, persistent urinary tract infection, but evidence of renal inflammation was not seen histologically. None of these men has responded to steroids. One died in uremia and, in two others, the clinical situation is relatively stable, apparently unaffected by oral steroid therapy.

Comment

The younger patient with good renal function and proliferative glomerulonephritis histologically should be aggressively treated with steroids, for a favorable response can be expected. Those individuals with hypertension, azotemia, and superimposed interstitial inflammation in the kidney have not been helped, and the course of their renal disease seems not to have been affected either favorably or adversely by the use of steroids.

Membranous Glomerulonephritis: This lesion is characterized histologically by a homogeneous and diffuse thickening of the capillary basement membrane. The glomeruli often exhibit the definitive "wire-loop" appearance which has been described in cases of disseminated lupus erythematosus (Fig. 3). None of our patients presented this lesion in

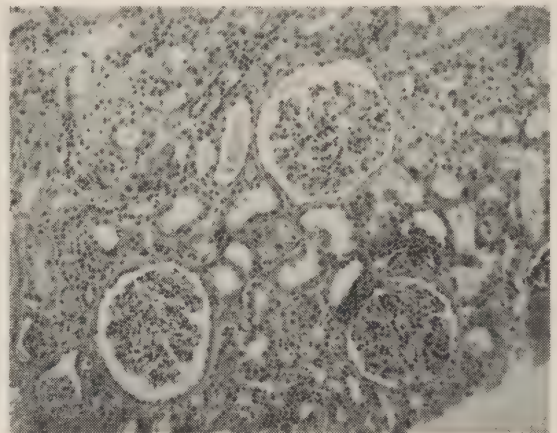


Figure 2. HE X 150

Proliferative Glomerulonephritis, Case 4, Table II. Note increased cellularity, and increased density of cytoplasmic substance in these glomeruli as compared to Figure 1.

its pure form save for those who had clinically diagnosed disseminated lupus erythematosus. Since the clinical course of this disease is so variable, usually marked by a rapidly deteriorating course with occasional spontaneous remissions, the five patients with lupus erythematosus are grouped separately.⁸

All of these patients showed marked membranous change and two of the five also had proliferative changes present. Of these five, two responded to steroid therapy with increasing edema, rising blood urea nitrogens, and rising blood pressures. One of them continues to do badly, and the other one has subsequently had a spontaneous remission (Table 2). Two patients died of progressive renal disease while on steroid therapy. One young woman has done well on continuous oral steroid but has been plagued by the side-effects of continuous high steroid dosage.

Comment

Membranous glomerulonephritis characteristically does not respond to steroid therapy, and the course of this renal lesion seems to be unaffected in most cases. Therefore, the induction of steroid toxicity in the absence of definitive symptomatic improvement is not justified in these patients.

Mixed Membranous-Proliferative Glomerulonephritis: As the name implies, the histologic

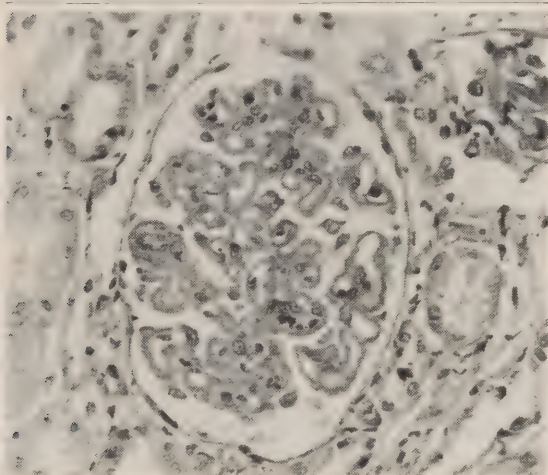


Figure 3. (AB-PAS X 380)

Case 15. Table II. Severe membranous glomerulonephritis in a young male with lupus. Note diffuse homogeneous alteration in capillary loops with resulting "wire-loop" appearance.

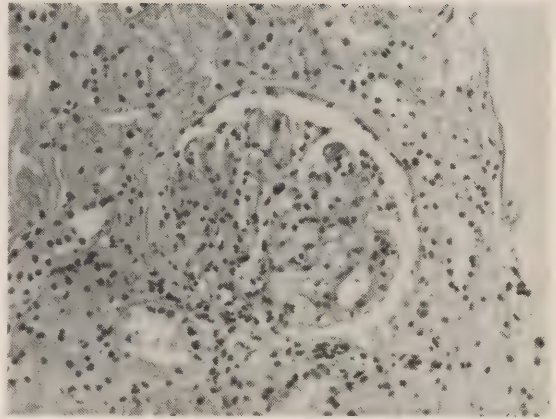


Figure 4. (HE X 200)

Case 14. Table II. Mixed proliferative and membranous changes. Note crescent formation, cytoplasmic density and cellular proliferation on right side of glomerulus and thickened capillary loops arranged in lace-like pattern on left.

features of this disease include the characteristics of both membranous and proliferative glomerulonephritis in varying and inconstant degree. Four patients from this series are so classified (Table 2) (Fig. 4). One of them, a 13 year old boy, has been treated intermittently since 1954. He remains edema-free so long as he is maintained on daily low-dosage steroid therapy. The tissue obtained by renal biopsy from this patient is interesting in that it shows normal, scarred, membranous, proliferative, and mixed membranous—proliferative glomeruli in a single biopsy specimen. Two other patients responded well to single courses of treatment and are doing well, edema-free, 6 and 24 months later without maintenance steroids, although both continue to spill large amounts of protein in the urine. The last patient, a 53 year old male, has showed no objective or symptomatic response to two courses of steroid and continues to show signs of progressive renal failure.

Comment

In mixed membranous-proliferative glomerulonephritis, the response is uncertain. Younger patients with adequate renal function should be treated aggressively, for good symptomatic results can be expected in a reasonable number of them.

Toxic Nephropathy: The last patient, whose case has been reported in detail elsewhere,⁹

was nephrotic as a result of chronic mercury poisoning. He did not respond to many courses of steroid, and died of uremia (Table 2).

Discussion

Five of these patients are dead, five are alive and symptomatically ill, resistant to therapy, five are alive and maintained in a state of reasonable health by the continuous administration of steroids, and five are alive and doing well without steroids. Of the last five, four still show evidence of renal disease and only one, the young woman whose disease was thought to be due to drug idiosyncrasy, is clinically free of renal disease at this time.

Seen in this light, adult nephrosis presents a gloomy picture. A favorable symptomatic response to the use of corticosteroids in the adult with the nephrotic syndrome can be predicted in only about 50% of cases. An excellent response can be predicted in only about 25%.

These considerations apply to symptomatic relief of edema and other symptoms of the nephrotic syndrome. Although there is persuasive data that the course of childhood nephrosis is favorably affected by steroid therapy,⁸ the experience with adult nephrosis does not allow conviction that the longterm prognosis of the disease or the evolution of the renal lesion is fundamentally altered by the use of steroids. The follow-up of these cases also does not allow one to conclude that these patients' lives have been prolonged.⁹

When one considers only the histological lesion, those with indeterminate renal disease do best. Those with proliferative glomerulonephritis and not much evidence of destruction of renal tissue can also be expected to respond well. Those individuals with proliferative glomerulonephritis with evidence of interstitial inflammation in the kidney have done badly.

The patients with the membranous lesion often have lupus erythematosus. Some of these will respond to steroids, but in common with the experience of other observers, this has been a discouraging entity to treat. The pa-

tients with the mixed proliferative membranous lesion run indeterminate courses, some doing well and some doing badly.

The younger patient with normal blood pressure, good renal function without evidence of renal inflammation in the urinary sediment, can be expected to do well. The severity of the nephrotic syndrome, by which is meant the degree of edema, the number of grams of protein spilled per day, the severity of the hypoalbuminemia, and the hyperlipemia has little to do with predicting response.

Renal biopsy is a safe, relatively painless and productive technique. The incidence of complications post-biopsy is low. In over 400 biopsies performed at the Medical College Hospital during the last four years, there have been only two major complications as the direct result of this procedure. There have been no mortalities. The overall incidence of complications is less than 10% and most of these are minor, consisting only of some pain at the biopsy site.

It is recommended that renal biopsy be performed in patients with the nephrotic syndrome. Patients with a histological diagnosis of indeterminate renal disease (lipoid nephrosis), proliferative and mixed membranous-proliferative glomerulonephritis should have adequate and aggressive courses of steroid therapy if they do not experience spontaneous remissions. An adequate course of treatment in an adult patient is the equivalent of 60 to 80 mg of prednisone daily in divided doses for a minimum period of six weeks if there is no response. A response can usually be anticipated in 10 to 14 days, but in some patients a delayed effect is seen. The effectiveness of treatment can be gauged by decreases in the total daily urinary protein spill which will characteristically precede any diuresis. The significant improvement is in the degree of protein loss which is a reflection of a change in the glomerular lesion.

In patients in whom a diagnosis of membranous glomerulonephritis or the membranous nephritis of lupus erythematosus is established, a course of steroid therapy should be

tried. However, the clinical picture will often deteriorate with evidence of increasing edema, increasing blood pressure, and increasing blood urea nitrogen. Characteristically, this adverse response is seen in patients who have poor renal function. If this response to treatment is obtained, it is recommended that steroid dosage be discontinued gradually, rather than abruptly, and other methods to relieve the patient of edema be attempted.

Summary

The experience with 20 patients with adult nephrosis in whom a renal biopsy has been performed has been presented.

The response of patients to treatment with

corticosteroid may be correlated with histologic features of the renal biopsy.

Renal biopsy is a useful adjunct in predicting the response of the patient with the nephrotic syndrome to treatment with steroids. Response in about 50% of the cases can be anticipated in patients with indeterminate renal disease, proliferative glomerulonephritis, and mixed membranous-proliferative glomerulonephritis. A poor response can be anticipated in patients with membranous glomerulonephritis and in those with advanced renal disease.

Acknowledgment

This paper would not have been prepared without the enthusiastic support of Dr. Forde A. McIver, Associate Professor of Pathology.

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Long-term anticoagulation in sickle-cell disease. John E. Salvaggio, Charles A. Arnold, and Charles H. Banov (Charleston). *New Engl J Med* 269:182-186 (July 25) 1963.

A clinical study of 12 patients with SS hemoglobin who were treated with sustained orally administered anticoagulants at Charity Hospital of Louisiana was carried out in an attempt to alter the clinical course of the disease by decreasing the fibrin formation. Previous forms of therapy utilized in SS disease are reviewed, and the rationale for an attempt with long term anticoagulant therapy is discussed.

Although the average occurrence of major painful crisis per unit of time was decreased, 7 episodes of bleeding occurred during therapy, 1 of which was a nearly fatal corpus luteum hematoma. These complications outweighed the slight clinical improvement obtained in this series.

Sarcoidosis. I. Familial occurrence, II. Pseudotumor cerebri and unusual skin lesions. J. R. Allison Jr. (Columbia). *Southern Med J* 57: 27 (January 1964).

Abstract #1: Familial sarcoidosis is apparently rare. There have been fifty-one cases in non-twins in 21 families and six in identical twins but no reports in fraternal twins. This case reported was unusual in that the disease occurred in two brothers and in two children of one brother. This is apparently the first such report of four such cases in two generations of one family and the seventh instance of involvement of the parent and offspring.

Abstract #2: This was an unusual case of sarcoidosis with symptoms of pseudotumor cerebri and unusual rupial psoriasis-like skin lesions that are not generally thought of as being produced by sarcoidosis.

TRIACETYLOLEANDOMYCIN

LOUIS JERVEY, M. D.

Medical College of South Carolina, Charleston, S. C.

Now available in "true living color" is a 16 millimeter movie certain to be of vital interest to each and every practitioner in the state.¹ This production, distributed as a "public service to the medical profession" by a pharmaceutical house, proves that "with standardized discs and with the guidance of qualified clinical microbiologists, susceptibility tests performed in one institution may be reproduced in another"—a conclusion that we have awaited with bated breath for years.

If superficially this seems to be much ado about nothing, a glance at the published results will prove otherwise.² In this study which compares the in vitro susceptibility of four microorganisms to chloramphenicol, erythromycin, penicillin, tetracycline and triacetyloleandomycin, it's "TAO" (oops! triacetyloleandomycin) out front by a head almost ad nauseum. One might ask how one interprets these results which utilize a 15 microgram erythromycin and triacetyloleandomycin disc, a concentration rarely achieved in human serum. One might also marvel at the coincidence that triacetyloleandomycin was included among the test drugs, rather than novobiocin, oxacillin or others.

Since this film will be shown to a number of practicing physicians who are in no position to understand the complexities of such in vitro comparative studies, it seems justified to cite a few points. The treatment of human infections with antimicrobial agents is much more complex than the relationship between bacteria and antibiotics in the test tube would suggest. In the human host the ultimate effectiveness of a drug is influenced by factors such as absorption and achievable

serum concentrations, binding by serum proteins and biologic activity of the drug against specific microorganisms.

Oleandomycin is classified as an erythromycin-like antibiotic because both drugs have a common macrolide nucleus. Staphylococci made resistant to erythromycin in the laboratory become cross-resistant to oleandomycin without exception. However, naturally occurring erythromycin resistant strains, may show susceptibility to oleandomycin in varying numbers.

Erythromycin was found to be four or more times more potent than oleandomycin in its antibacterial activity against streptococci and staphylococci by early workers.³ Triacetyloleandomycin, an acetylated modification of oleandomycin, produces higher serum levels due to better absorption. Serum levels, however, are expressed as oleandomycin base since very little of the triacetyl form can be measured in the blood. Studies by a number of investigators have shown that despite improved blood levels, the antibacterial activity of triacetyloleandomycin is still far less than that of an equivalent amount of the newer erythromycin preparations.^{4, 5, 6} Without a knowledge of such facts, a therapeutic decision based upon in vitro tests alone could be disastrous.

Both triacetyloleandomycin and the laurel sulfate ester of erythromycin can produce hepatotoxic effects in patients treated for two weeks or longer.^{7, 8} Neither drug is a good choice alone for treatment of serious staphylococcal infections since staphylococci tend to develop resistance to these agents in rapid step-wise fashion, and since newer more potent antistaphylococcal agents are available.

One report⁶ has suggested that triacetyloleandomycin is as effective in the treatment of beta hemolytic streptococcal infections in children as is penicillin, and more effective than erythromycin propionate. Confirmation of these observations by others is desirable. Meanwhile, penicillin would still seem to be the drug of choice for group A beta hemolytic streptococcal and pneumococcal infections

with erythromycin the second choice. Triacetyloleandomycin has a limited place in the treatment of selected minor staphylococcal infections and more rarely in the treatment of streptococcal and pneumococcal infections.

The recent resurrection of triacetyloleandomycin does not seem to be adequately supported by the facts.

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Observations on the etiology and pathogenesis of temporal lobe epilepsy. M. A. Falconer (Maudsley Hosp, DeCrespigny Park, London), E. A. Serafetinides, and J. A. N. Corsellis. *Arch Neurol* 10:233 (March) 1964.

One hundred patients with intractable epilepsy, who were suspected on clinical and electroencephalogram (EEG) grounds to have their seizures arise in one temporal lobe, were submitted to a unilateral temporal lobectomy. Cases with a known expanding lesion, radiologically demonstrable, were excluded. The anterior six to eight centimeters of the lobe were resected in one piece together with such deeper structures as the amygdala, the anterior part of the hippocampus, and the uncus. Subsequently, mesial temporal sclerosis was found in 47 cases, small cryptic "tumors" in 24 cases, cortical scars and infarcts in 13 cases, and equivocal lesions such as subpial and white matter gliosis in 12 cases. Six cases had multiple lesions. Of these lesions, the two most important are mesial temporal sclerosis and small cryptic "tumors." There is a striking tendency for both to implicate the amygdala rather than the hippocampus. The first is more likely to be caused by hypoxic episodes in infancy than by birth trauma; the second is probably of developmental origin. The results of

surgery were better in these two groups than in cases with scars, infarcts, and equivocal lesions.

Upper-quadrant bruit due to tortuous splenic artery. C. M. Smythe and Donald B. Gibson (Charleston). *New Eng J Med* 269:1308-1309, Dec. 12, 1963.

Increasing emphasis on the role of renal artery obstruction in the genesis of some cases of aggressive hypertension warrant attention to methods by which this diagnosis can be made. An important physical finding is a bruit over the kidneys. A patient was recently seen and is described in whom a left upper quadrant bruit was heard. Aortograms were done and a tortuous splenic artery was demonstrated. No other reason for the bruit could be detected, and it was assumed that this adventitial circulatory sound arose in this tortuous splenic artery. Tortuosity in the splenic artery is a normal finding and the extreme degree presented in this case represents only a normal variation.

An abnormal course of the splenic artery is thus added to the list of possible lesions which give rise to adventitial circulatory sounds in the upper abdomen.

VENTRICULAR FIBRILLATION WITH ACUTE MYOCARDIAL INFARCTION SUCCESSFULLY TREATED BY EXTERNAL ELECTRIC COUNTERSHOCK

REPORT OF THREE CASES, WITH USE OF DIRECT CURRENT IN TWO*

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Ventricular fibrillation is the cause of sudden death in many patients who die of ischemic heart disease and at one time was regarded as always being fatal. The recent use of closed chest cardiac massage and external electric countershock has revolutionized the technique of cardiac resuscitation.

There have been only 13 reported cases¹⁻⁹ of ventricular fibrillation with acute myocardial infarction treated with alternating-current countershock with recovery and discharge from the hospital. One reported case¹⁰ has been resuscitated with direct-current only to die 17 hours later.

In the past 16 months we have treated three patients with ventricular fibrillation associated with acute myocardial infarction with the above methods with survival and ultimate discharge from the hospital. Direct current was utilized in two of these. These cases are reported in order to emphasize the value of these techniques in salvaging patients who previously had little chance of survival.

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Case Reports

Case 1. A 50 year old white male was admitted to Roper Hospital on April 26, 1962 with epigastric distress secondary to a proven duodenal ulcer. He was treated with an ulcer regimen with gradual improvement. On May 3, 1962 at 3:00 A. M. he developed burning substernal pain and was given intramuscular Pro-Banthine and Demerol with relief. The next morning on the way to the bathroom he suddenly fell over and became cyanotic. He was seen by several senior medical students and had no detectable cardiac action. An airway was inserted and closed-chest cardiac massage was begun immediately. Twenty minutes later, a cardiac monitor revealed ventricular fibrillation and external countershock with a discharge of 350 volts from the AC defibrillator was accomplished. There was immediate restoration of the sinus mechanism with occasional premature ventricular contractions. Electrocardiogram revealed an extensive anterior myocardial infarction. The patient was maintained on quinidine 200 mg every three hours. Serum transaminase (SGO-T) activity rose to 208 units. X-ray film of the chest revealed multiple bilateral rib fractures. He was discharged on May 31, 1962 after an uneventful hospital course and has continued to do well until the present time (fifteen months after myocardial infarction).

Case 2. A 31 year old colored male farmer was admitted to the Medical College Hospital on April 29, 1963 because of severe substernal chest pain and dyspnea. Physical examination revealed a blood pressure of 126/96 mm. Hg, grossly irregular cardiac

rhythm, profuse sweating, and classic signs of acute pulmonary edema. Electrocardiogram showed the changes of an acute anterior lateral myocardial infarction with intraventricular conduction delay. There was a regular sinus rhythm with numerous premature atrial and ventricular contractions. Serum transaminase (SGO-T) activity reached a peak of 340 units. Rapid digitalization was accomplished with marked clearing of the pulmonary edema. Because of the persistence of multiple premature ventricular contractions quinidine was begun in the dosage of 300 mg every six hours. On the eighteenth day of hospitalization the patient had a grand mal seizure and an electrocardiogram revealed ventricular fibrillation. Closed-chest cardiac massage was begun immediately and continued for five minutes, when defibrillation was accomplished, using the DC current defibrillator with a discharge of 200 watt seconds. The patient responded rapidly and developed a regular sinus rhythm with numerous multifocal premature ventricular contractions. Quinidine was then increased to 300 mg every four hours and constant cardiac monitoring was begun. Fifteen hours later he had another grand mal seizure with ventricular fibrillation. External defibrillation using the direct-current defibrillator was again accomplished with 200 watt seconds discharge with the same response as previously. Level of consciousness was depressed for 30 minutes but then became normal. At this time quinidine was discontinued and procainamide 500 mg intramuscularly every three hours was begun.

The course was one of gradual improvement with a decrease in premature beats. Procainamide was gradually withdrawn and maintenance on quinidine 300 mg every three hours was begun. The patient was discharged on June 16, 1963, 49 days after his initial myocardial infarction and 31 days after his last episode of ventricular fibrillation. Quinidine 300 mg every three hours and digoxin 0.5 mg daily were continued. He was essentially asymptomatic and his electrocardiogram revealed rare premature ventricular contractions at the time of discharge. Some three weeks later he was seen in the outpatient department, and at that time was having episodes of paroxysmal ventricular tachycardia. Admission was strongly advised, but refused, therefore procainamide was added to his regimen. Several days later he expired suddenly while sitting on his front porch, apparently from an episode of ventricular fibrillation.

Case 3. A 63 year old white male was admitted to the Medical College Hospital at 3:30 P. M. on June 10, 1963 after having had nausea and substernal heaviness at 12:10 P. M. On admission rhythm was regular and BP 130/80. At 4:00 P. M. he was found by the nurse to be cyanotic and gasping for breath. He was seen immediately by the medical house staff and closed-chest cardiac massage and mechanical respiration were begun. An electrocardiogram revealed ventricular fibrillation (Figure 1). His pupils

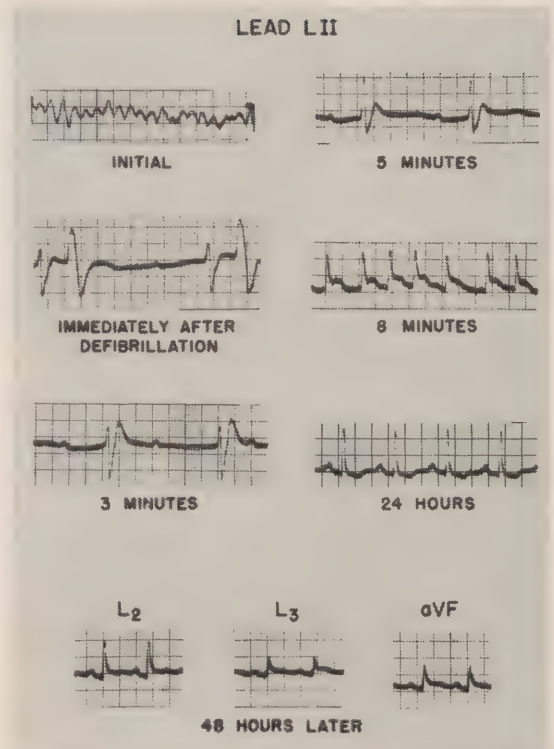


Figure 1. Electrocardiographic tracings (Lead 2) depicting sequence of events with time intervals from the time of DC countershock (200 watt seconds) to restoration of sinus rhythm.

were not dilated, and it was estimated that he had been in ventricular fibrillation for about three minutes when seen. Closed-chest cardiac massage was continued for 10 minutes while the direct-current defibrillator was obtained. He was given a discharge of 200 watt seconds with development of a slow idioventricular rhythm. This continued for about five minutes, and was followed by first degree AV block and intraventricular block. At eight minutes atrial fibrillation with a rapid ventricular response appeared. Electrocardiogram at this time also revealed evidence of an early acute diaphragmatic myocardial infarction. Following the defibrillation, the patient became maniacal and required considerable sedation. Rapid digitalization was accomplished and on June 11, 1963, 24 hours later, a regular sinus rhythm developed. Figure 1 depicts the serial changes and time intervals from defibrillation to regular sinus rhythm. His abnormal behavior gradually cleared and follow-up tracings revealed evolution of an acute diaphragmatic infarction. Serum transaminase (SGO-T) activity reached a peak of 150 units. His further course was uneventful and he was discharged on July 11, 1963. At last report, he continues to do well.

Discussion

Open chest cardiac defibrillation has been

used since 1947,¹¹ but this procedure is primarily beneficial in patients undergoing surgery. The results with open methods in ventricular fibrillation associated with myocardial infarction are poor. The introduction of external defibrillation by Zoll and his associates in 1956,¹² followed by the development of external cardiac massage by Kouwenhoven and associates in 1960,¹ afford methods of cardiac resuscitation adaptable to use on a medical ward and apparently more efficacious in salvaging patients with ventricular fibrillation. Theoretically, electrical countershock of the heart produces simultaneous depolarization of all cardiac fibers, causing the ectopic foci to be extinguished and permitting the sinus node to resume as pacemaker. In some instances (Case 3), even though ventricular fibrillation is abolished, the sinus node is apparently unable to perform this function immediately and effective cardiac rhythm of other origin is initiated. Less often, cardiac asystole will be encountered and use of the external cardiac pacemaker will be necessary.

It is of interest that of the three cases reported, patients 2 and 3 were defibrillated using the Lown cardioverter which requires direct current and patient 1 defibrillated with the use of the electrodyne machine which employs alternating current. Lown¹³ in animal experiments demonstrated that the use of

direct current was accompanied by fewer and less frequent arrhythmias and was more efficacious in controlling episodes of ventricular fibrillation. Stanzler and his associates⁹ recently reported a case in which two episodes of ventricular fibrillation in a patient with acute myocardial infarction failed to respond to alternating current but were promptly terminated by direct-current countershock.

It is not possible, at this time, to predict what effect these methods of cardiac resuscitation will have on the overall mortality of acute myocardial infarction. However, when initiated promptly, they may be life saving in the individual patient.

Summary

Three case reports are presented of patients who developed ventricular fibrillation with acute myocardial infarction which was treated successfully with closed-chest cardiac massage and external electric countershock. In two of the cases direct current was utilized, and to our knowledge these are the only reported cases of survival and ultimate hospital discharge after ventricular fibrillation with acute myocardial infarction and resuscitation with direct current countershock. These cases are presented to emphasize the use of these techniques in salvaging patients who previously had little chance of survival.

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OSTEOARTHRITIS OF THE HIP.

SOME OBSERVATIONS ON THE CAUSE AND TREATMENT.

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To some twelve million Americans, the slightest touch or the slightest movement brings agony. These people are members of the growing group of arthritis victims. With the conquest of fatal infectious and metabolic disease, the chronic and degenerative diseases will increase in size and significance.

About 50% of this group or approximately six million people are afflicted with osteoarthritis. Neither men nor women are spared this problem, the sex incidence being almost equal. Almost everyone past middle age develops osteoarthritis. Heavy laborers are especially prone to osteoarthritis. The farmer is its chief target. In contrast to the idea that working with one's hands and in the outdoors might be healthful, the farmer is more than twice as likely to be hit by arthritis as the city dweller.

Arthritis can severely limit the function of its victims. Arthritis disrupts the life of one American family in five. Three million arthritics are forced to adopt less active or productive work each year. An arthritic can count on missing an average of 15 work days each year. Approximately 238 million days of restricted activity are attributed to arthritis and rheumatism each year.

It appears that our profession is not exploiting all possible avenues in this too common problem. Of the 12 million arthritics, only about one half even see a physician and only 6% of these are seen by an orthopaedist. That even the orthopaedist does not treat this dis-

ease aggressively is suggested by the fact that only about 40% of those seen by the orthopaedist are treated by orthopaedic measures and a minuscule 4% are submitted to surgery. Only about 4,500 of an estimated 12 million arthritics are provided the benefits of modern arthritis surgery each year.

We view osteoarthritis as primarily a mechanical problem, the result of repeated wear and tear of a joint; but additionally there are great metabolic implications as evidenced by the fact that some races, some families, and some individuals are more susceptible to its ravages than others. Mechanical wear and tear is the sine qua non of osteoarthritis. It is this mechanical factor that we orthopaedists are most aware of and most interested in. It is this factor that we believe can be improved by properly selected, well planned, and correctly executed surgery.

The Hip Joint

Because of the great mechanical stresses so frequently applied to it, the hip joint is probably the most frequent site of disabling osteoarthritic symptoms. Dr. Walter Blount has shown that standing on one leg does not put merely the body weight on the hip joint. Because of shifting of the center of gravity, lever arms and muscle pull necessary to maintain balance, the pressure exerted on the femoral head is about four times the body weight when standing on one leg. Thus, when a 200 pound man walks down the street, 800 pound stresses flick rapidly from one hip to the other. It is a wonder that hips last as well as they do.

Osteoarthritis of the hip joint is usually

From the Moore Clinic, Columbia, S. C.

divided into two types, primary and secondary. Primary arthritis is that type which is not preceded by any known deleterious mechanical set up or propensity to degeneration. Secondary arthritis follows some recognized pathological condition which is thought to lead to the development of arthritis. As the primary group is studied more thoughtfully and thoroughly, often predisposing causes can be ascertained and many cases can be transferred to the secondary group. With improving knowledge, more factors leading to the development of osteoarthritis are being discovered. With the discovery of cause, it is hoped that better methods of prevention can be worked out.

An excellent example of this is our increasing appreciation of the significance of anteversion of the femoral neck. Femoral anteversion has long been recognized as a part of the picture of congenital dysplasia and dislocation of the hip. Its relationship to osteoarthritis of the hip has been essentially unrecognized. Dr. Austin T. Moore, in performing many prosthesis operations for seemingly primary osteoarthritis of the hip in middle aged individuals, noticed and became impressed with the frequent finding of anteversion of the femoral neck. This led to an analysis of children with this condition and to the formulation of an hypothesis. We believe that incomplete correction of femoral anteversion often leads to use of the hip in an incongruous position, excessive wear and tear and early arthritis.

A child with anteversion walks with the toes turned inward, "pigeon toed." If the parents' bantering and a physician's braces induce the child to walk with the toes straight while there is still anteversion present, the femoral head can be turned partially out of the socket, reducing the weight bearing area and opposing incongruous surfaces. This is all that is necessary for the rapid destruction of the joint.

Anteversion is certainly a frequent childhood condition. If it is as destructive as we feel that it is, many cases of osteoarthritis

could be prevented by early correction of anteversion. We have started doing derotational osteotomies at a very early age, hoping to save the hip joints.

For established osteoarthritis of the hip joint, surgical measures directly on the joint are required. Our methods are:

1. Non-osseous or soft tissue.

- a. "Hanging hip" or decompression operation. In this procedure, extensive tenotomies and fasciotomies are performed to relieve the pressure exerted on the hip by muscle pull. The tip of the greater trochanter may be osteotomized as described by Voss, but we have abandoned this portion of the operation because of the severe and prolonged abduction lurch which follows. We release the fascia lata, iliopsoas flexors and adductors of the hip only. This gives adequate release but preserves strength of abduction. This procedure is used only in cases classed as mild surgical, i.e., some irregularity of articular surfaces and slight narrowing of the joint by x-ray.

- b. Denervation of the hip.

The sensory branches of the obturator, the femoral and the sciatic nerves to the hip are divided. This may be useful alone but is usually used in combination with the above operation or the ones to follow. These candidates may be classified as moderate to severe surgical.

2. Osseous:

- a. Replacement of the femoral head with vitallium Moore self-locking prosthesis. When the irregular femoral head is replaced by the smooth regular surface of the prosthesis, one portion of the underlying pathology, i. e., the degenerating cartilage of the femoral head is immediately replaced. Thus a smooth surface once again articulates with the acetabulum. In most instances this factor alone should be enough to relieve partially, if not

completely, the patient's pain. In many cases there is also some degree of flexion and adduction contracture. In addition to prosthetic replacement in these cases, we frequently do tenotomies, fasciotomies, and partial neurectomies, as described above.

b. Acetabular reconstruction.

Reconstruction of an inadequate acetabulum is frequently necessary in these cases. If the acetabulum is shallow, it is deepened enough to securely retain the prosthetic head, but not enough to produce a protrusio acetabuli. In treatment of protrusio acetabuli, the excessively deep acetabulum is shallowed by packing in bone. The

smooth, hard prosthetic head will perfectly mold the new articular surface. It is extremely important to have the acetabulum deep enough so the body weight will be equally distributed over the prosthetic head, so that a "wandering acetabulum" will not occur. The acetabulum must not be so deep that penetration of the inner wall develops.

Summary

The prevalence of osteoarthritis of the hip has been mentioned. Some new thoughts in its genesis have been propounded and several surgical methods of treatment have been described.

Tuberculosis casefinding among contacts in seven South Carolina counties, by F. L. Geiger and Janie M. Kuemmerer. Public Health Rep 78:663-668, Aug. 1963.

Sixty-two new active cases of tuberculosis were found as the result of contact investigations of 146 index cases newly reported in 1961 in a 7-county area of South Carolina. Seventy-nine percent of the 40 index cases in white persons and 89 percent of the 106 in Negroes were in the advanced stage when reported.

In tuberculin tests of 357 contacts under 20 years of age, 113 persons were reactors, and 38 of these were found to have active disease. A total of 699 contacts were examined. The three active cases in white contacts stemmed from index cases in persons whose sputum was positive by smear and culture. Of the 59 cases in Negro contacts, 41 were found in initial examinations and 18 in subsequent examinations. All but four were in contacts to index patients whose sputum was positive by smear and culture.

The active tuberculosis case rate per 1,000 Negro contacts examined was 116. Negro children (0-4 years) showed the greatest risk among contacts of developing tuberculosis, with an age-specific rate of 131 per 100,000.

Venous patency after thrombectomy, Dr. R. Randolph Bradham (Charleston). Arch Surg 88:16-22, Jan. 1964.

The present methods of treating acute venous thrombosis leave much to be desired. Pulmonary embolus and the crippling sequelae of the postphlebotic extremity remain severe complications of this condition. Thrombectomy with systemic heparinization has promise of becoming a more direct and

complete avenue of therapy for well selected cases of acute spontaneous venous thrombosis.

A group of experiments has been designed and accomplished to evaluate the results that may be expected when thrombectomy is done within 24 hours after the onset of the thrombus. Thrombosis was induced in femoral veins of dogs. A control group demonstrated the early re-formation of an occluding thrombus when thrombectomy alone was done. In a second group of dogs, heparinization prevented thrombosis. The third group was subjected to thrombectomy in combination with systemic heparinization. The results indicated that this method of therapy was direct and would restore patency and function in the major portion of the veins from which occluding thrombi were removed.

A small group of patients have been subjected to this mode of therapy, and in all, the results have been encouraging. The edema subsides rapidly, and the postphlebotic, chronically edematous leg is avoided in a major per cent of the cases.

Acid-base balance during and after cardiopulmonary bypass procedures. George H. A. Clowes, Jr., M. D. (Charleston). Amer J Cardiol, 12: 671-677, (Nov. 1963.)

The metabolic problems associated with perfusion of the body with an extracorporeal pump and oxygenator have been briefly reviewed. They are primarily related to the tissue injuries inflicted by inadequate oxygen delivery to the tissues and by trauma to various elements in the blood. Postoperatively, maintenance of normal conditions is dependent upon adequate function of the central nervous system, the lungs, and the cardiovascular system.



President's Page

It is with a deep feeling of appreciation and responsibility that I assume the Presidency of the South Carolina Medical Association. There may be larger Medical Associations in the Country; but we bow to none, in services rendered so far as facilities permit.

The medical profession is faced with the task of maintaining the integrity of the private practice of medicine, and at the same time furnishing the high standard of medical care which we have taught the public to expect. However, we must be forced to admit that though we have the most efficient and highest standard on medical care in the world, at the same time the esteem that we have enjoyed in the past has been lessened. This loss in prestige is not so much in the individual doctor as in the profession as a whole. This can be corrected. Perhaps not enough stress has been laid on what the public gets for its money and too much on how much it costs. Certainly no undue dividends are reaped on the investment of time and money that every doctor puts into his profession, both before and after he begins to collect fees.

Our mission in medicine is to continue to furnish the highest standard of medical care. In order to do this, we must maintain our present system of the private practice of medicine, under which system, such remarkable strides have been made.

To meet the problems that are with us and will arise during the coming year, your President will need the help and advice of the doctors of the State. I earnestly ask that cooperation.

Frank C. Owens, M. D.

Editorials

Legislation, 1964

This session of the Legislature, recently concluded, considered a number of bills of medical concern. One of the most important of them was the Osteopathy Bill, which would have allowed osteopaths to include practically the whole scope of medicine in their practices. At this writing, the bill has been referred back to committee and seems unlikely to reach the floor for a vote.

A bill aimed at enlarging the field of podiatry is in the same situation and probably dead for the time being.

A Good Samaritan Bill, offering legal immunity to those physicians who render aid to victims of accidents, passed both the houses without difficulty.

The bill directing that at least two members of Mental Health Boards be physicians and requiring consent of proper persons to transfer patients from mental institutions to some other state was passed by both houses.

The "eclectic medicine" bill, intended to give special privilege of practice to an individual, received little support and is apparently not viable.

The bill requiring that the overall director of the Commission on Mental Health Services be a medical doctor was still in committee and possibly will not emerge until next year.

A bill to add a veterinarian to the membership of the Executive Committee of the State Board of Health passed both houses.

A State Department of Mental Health was created to assume the duties of the Mental Health Commission without any present change in membership or function. The Bill was signed by the Governor.

The Bill providing for appointment of a committee to lend support and leadership to the Nursing profession, having passed the Senate, was amended in the House. Concurrence by the Senate and final passage will probably have taken place by now.

The interests of medicine, and thereby of the public, have been well served this year, not without some sweat, blood and tears. Unfortunately, some of the measures which failed to succeed this session may very well turn up again next year. Such is the way of the legislator.

Recommended Reading

An article in the *New England Journal of Medicine* on "Leadership in American Medicine" by John Gordon Freymann gives a clear picture of the services which the American Medical Association has rendered to its membership over many years past. The article traces the story of certain changes in attitude and points up the problems which face the profession today, touching particularly on the necessity for more cooperative understanding between the academic element and the practicing physician in order to achieve a unity of interest in the total welfare of medicine. It calls for a positive attitude to the AMA and for concerted action by members of this great organization to cement together the profession and to revitalize the whole organization.

For anyone interested in organizational medicine, this should be an extremely interesting article.

New Eng J Med 270:710 (1964)

"Let's Give the Medical Schools Back to the Students" by W. C. Dawson, M. D., former Dean of the Duke University School of Medicine, gives an interesting discussion of the balance, or imbalance, of teaching and research. Preoccupation with the latter seems to have shoved teaching under the rug in many instances.

Dr. Dawson believes that the older, more experienced members of a faculty should serve as active teachers, and that the business

of teaching should not devolve on the house staff. He has something to say of "grants in the pants" (Ed.—my term) and of "Grantsmanship" and of the bibliographical bug. He finds the personal contact with mature teachers essential for the student.

From the *Pharos of Alpha Omega Alpha*, October, 1963. Reprinted in *Federation Bulletin* 51:70.

The Color of Hill-Burton

The rack has been applied to those hospitals which have utilized Hill-Burton funds. By a Supreme Court decision concerning two North Carolina hospitals, they must now abandon arrangements for segregation. New applications will not be approved without this agreement, which includes staff privileges as well as patient privileges. Undoubtedly, an epidemic of lawsuits will soon be forthcoming. Grady Hospital in Atlanta is already under fire.

The great majority of hospitals in South Carolina must now readjust their thoughts and rules or be open to litigation. A few, such as Roper Hospital in Charleston, have not requested federal largesse and are not liable to suit under the decision.

A New Journal

With the feeling that the number of suitable journals available to authors wishing to present their scientific material is not adequate in this country, the *Alabama Journal of Medical Sciences*, a quarterly publication, has been established. Its purpose is to reduce the backlog of unpublished scientific papers and to speed communication in the health field. It will serve as the academic voice of the Medical College of Alabama, the School of Dentistry, and the University Hospital.

The first number is pleasing in appearance and satisfying in content. Our best wishes go to a new southern journal.

Blue Shield Abuses

Overutilization of Blue Shield benefits continues to be a problem in the financial affairs of the Plan sponsored by the South Carolina Medical Association. An editorial in the *New York State Journal of Medicine*¹ offers a very

frank comment on this subject which might be examined in our own state:

"Other evidence of increasing cooperation on the part of organized medicine is apparent in the establishment in some county medical societies of utilization committees that have been encouraged by UMS [the Blue Shield Plan in N. Y.]. By operating in a manner similar to hospital tissue committees, these groups can themselves participate in the prevention of excessive utilization problems.

"But despite a system that makes it hazardous to run the risk of fraud or abuse; despite the increasing realization by the county medical societies of their responsibility in reducing abuse and overutilization of health insurance benefits and their increasing tendency to crack down on offenders; despite a continuing education program, not only on the part of UMS, but of most Blue Shield and other voluntary health insurance organizations, to make both physicians and public more cognizant of the financial damage of overutilization; despite the consequences of medical society suspension or grand jury action and subsequent conviction—the answer to stopping abuses of health insurance benefits lies only with the personal determination of the individual physician. Perhaps we will never wipe out greed or dishonesty or our deepseated emotional motivations, but we can at least appeal to reason.

"Only when the physician becomes aware that it is not an industrial tycoon or a mass of wealthy stockholders whom he is hurting but every Blue Shield subscriber today and the millions more who may become Blue Shield subscribers in the future can we hope to solve the problem of overutilization.

"Only when he remembers that Blue Shield was created by the medical profession to solve pressing economic problems relating to medicine and that the continued solution of these problems depends on a strong Blue Shield will overutilization be stopped.

"Only when he realizes that ultimately it is not in the best interests of his patients when he submits to their pressure for "abuse" favors will excessive claims be reduced.

"Only when he realizes that because of the serious consequences involved for the medical profession and the American people, the plans must be policed—and that if the policing isn't done by the local plan and its cooperating physicians, it will be done by official agencies—will the problem be solved.

"The damage that has been done to the public image of the physician during recent years is evident. But it is nothing compared to what could happen if zealous public officials feel they must cite statistics of cheating and seek the power to control our profession in areas where we have always prided ourselves on our desire and ability to police ourselves.

"We help to protect our own profession and our own professional freedom when we protect our colleagues from unjustified public scrutiny or abuse. But when we offer this protection where scrutiny or

criticism is in fact warranted, we do not act in our best interests. If we fail to do our full part in eliminating abuse of health insurance benefits, the abuses are bound to increase, and we will lose even the right to do our part.

"Not only should we seek to strengthen our own societies' means for eliminating abuse, and not only should we seek to establish committees for this purpose in every society to prevent abuse, but every physician must serve as his committee of one to insure that no abuse stems from his own practice."

Note. Copies of Utilization Control in a Blue Shield Plan, by Harold J. Safian, M. D., Assistant Vice-President and Medical Director, United Medical Service, 2 Park Avenue, New York, New York 10016, are available on request to his office.

1. New York J Med 64:355 (Feb. 1, 1964).

Peace Corps

For those who are interested in the opportunities for experience and service which are offered by the Peace Corps, information and detail on the workings of the Corps may be obtained from Physicians, Division of Recruiting, Peace Corps, Washington, D. C., 20525.

AMA - ERF

Under the provision of its loan program as a ready and convenient resource for medical students, interns, or residents who meet the minimum qualifications, AMA-ERF has given assistance to a total of eighty-three individuals in South Carolina during the years 1962 and 1963 and has loaned the amount of \$99,800.

—If This Be Treason—

"There should be in every school of medicine one or more teachers who have been in general practice for 10 to 20 years. Indeed it would be well if a young man were encouraged to enter general practice with the expectation that if he proved himself fit he should be qualified to become a teacher, and have the opportunity in a well equipped hospital of solving the problems he has had to face in his practice."

Sir James Mackenzie—*The Future of Medicine*—1919

THE POWER OF DRUG ADVERTISING

The drug manufacturers have not been shown by the Kefauver committee to have made unreasonable profits. The cost of drugs is materially reduced by advertising. If only two tetracycline tablets were sold per year, the tablets would cost in the hundreds of thousands of dollars, or maybe even in the millions. Ethical advertising by stimulating trade reduces the cost of drugs so that any American can buy proper drugs. Among chemically complex drugs, the less sold, the higher the price. The drug manufacturers should be allowed to make a profit as long as there is no collusion on price fixing; it is the American way to try and earn a profit fairly; if the price is too high a competitor can effect its lowering through offering for sale a less expensive product.—Alfred Kahn, Jr., M. D., in *Journal of Arkansas Medical Society*, Feb. 1963.

Public Relations

ON MEDICARE

[At the suggestion of one of our readers, the following talk given by the Editor before a civic club is printed as a sample of its kind.]

I think I speak for the local medical profession in assuring you that we are in no way opposed to proper assistance in medical care for the aged population. We are opposed to the distribution of medical care as it would be provided under the King-Anderson Bill, not because we think provision is unnecessary but because we think the way in which it is proposed to give help is wrong on several counts.

You are probably all more or less familiar with the proposal in this bill now likely to be considered by Congress in the near future. This is not a new kind of bill; over the past recent years we have had a number of proposals in the form of the Wagner-Murray-Dingle Bill, the Forand Bill, and others of

a similar nature, so that we are not dealing with a new concept.

The concept which the current bill offers is that by increasing social security taxes a moderately generous amount of medical care might be offered under federal auspices to all of our citizens over the age of 65, regardless of whether they are paupers or millionaires.

With the amount of care that is offered, there can be little objection. It would provide a fairly liberal number of days in the hospital, in nursing homes, in out-patient clinics, and would provide a large number of home visits to the sick old people. The difficulties here lie in the scarcity of hospital beds, the relative lack of good nursing homes, and the almost total absence of nurses who might be available for these proposed home visits. No provision is offered for the payment of physicians, but this is not one of the objections raised by the profession.

If this program is related in any way to other federal programs, it will inevitably expand its benefits, its costs, and its controls.

There will be no provision for a means test for patients under this arrangement. The means test has been held up as a great bug-a-boo by those who support this legislation, as a shameful intrusion on personal privacy, and as a serious objection. To the person who reports an income tax, who makes various business and credit arrangements, an informal means test is nothing new, and nothing disturbing. Why it should become a social degradation is not clear!

Under the proposed provision, a means test might be very revealing, indicating that the great majority of the people in the over-65 age group are not nearly the paupers which some people would make them. A very large number of them have private insurance coverage. A very large number of them have income superior to those of younger age groups, and a large number would not want to accept the benefits of funds extracted from a younger and hard working population.

Statistics are, as usual, confusing, depending somewhat on the compilers. Proponents of this legislation maintain that the earnings in the older group are small and inadequate, by and large. Other statisticians, taking account of income from various sources and assets accumulated over the years, find the older group not nearly as poor as do their opposite numbers.

What would this program cost the country? In these days of billions the estimated sum of 1.4 billion perhaps does not sound out of range. Already it has been conceded by the actuaries that this figure is far too low and that it probably should be doubled.

The temporarily proposed increase of one fourth of one per cent in social security payments means an increase of at least 16 per cent in the amount which the worker will pay and which must be matched by his employer. The level for taxation is to be raised to \$5,200 and the increase would cost something in the neighborhood of \$27.50 a year instead of the \$12.50 or 25 cents a week which has been used by those backing the bill.

Why do physicians oppose this bill? (—And the vast majority of them do).

First, they recognize, although it is denied, that there will be definite control of the practice of medicine because hospitals to which participants in the program are to be admitted must be hospitals approved by the federal government. Inevitably, any hospital which is receiving money from the government must come under its control. Control of the hospitals means control of those members of the medical profession who work almost strictly in hospital surroundings; anesthesiologists, pathologists, laboratory physicians, physiatrists, radiologists, and interns and residents.

Many physicians are disturbed too, because the

bill provides some regulation of the use of drugs. They do not like the proposal that the length of a patient's stay in a hospital shall be determined, not by his physician, but by a review committee of the hospital staff, a staff which must be subject to governmental pressures.

They object to the arrangement because not all doctors are staff members of all hospitals; local conditions determine membership to a large extent. A physician who is not a staff member could not admit a patient to the specified hospitals.

Hospitals under federal supervision would undoubtedly be subject to establishment of hospital rates by federal committees, an arrangement which might be fatal to the hospital. Beds are scarce, and the doctors feel that the King-Anderson Bill would produce an enormous demand for hospital care which could not be met by the profession directly. Medicine sees in this scheme further advancement of socialistic trends, similar to those already established in the Veterans' Administration.

The profession has been backing the Kerr-Mills Act which provides funds for needy persons over 65. It has the distinct advantage of being administered by state and county agencies rather than a federal bureau. The state appropriates funds and the federal government matches.

Its provisions are not as liberal as that of the proposed King-Anderson Bill, but it could be adjusted and expanded to provide very satisfactory service to the group of citizens who are in need. It will no doubt be changed for the better as time passes. There are various other proposals involving government payments for purchasing private insurance, or a combination of benefits and insurance, and other parallel propositions. One proposes that federal taxes might be rebated to allow purchase of insurance. These are still in the stage of discussion.

It seems supremely unwise to move into the dangerous ground proposed by King-Anderson. The problem is not so urgent that more mature and reasonable discussion could not bring out an acceptable substitute for what appears to be a very objectionable bill. Unfortunately, we are all so case-hardened to the compulsion of social security in general that many of us do not see the danger in an additional federal control.

Some of the organizations of older people have been very bitter about the stand of the AMA. This is unfortunate for the profession, misunderstood, I believe, by the aged group. It seems that that group has in mind the utopian something-for-nothing thought, and for the present older group, it would be something for nothing, because that group would have paid nothing of consequence toward the immense fund which would be required for their impending hospital costs.

Election year is a fine time to offer federal money, your money and my money, to a large group of elderly voters, who may see only their own personal interests at stake.

News

Tri-State Medical Association

The Association will meet June 8th, 9th, and 10th, at the Carolinian Hotel, Nags Head, North Carolina. An ample and appealing program has been arranged.

Officials of this organization include Dr. C. S. McCants of Winnsboro, president, Dr. C. W. Evatt of Charleston, vice-president, and Drs. J. W. Jervay, Jr. of Greenville, I. Ripon Wilson of Charleston and J. A. Johnson of Orangeburg, councilors.

Institutes in the Care of Premature Infants

These institutes for physicians and nurses are being continued at the New York Hospital—Cornell Medical Center. They are primarily for physicians and nurses in charge of hospital premature nurseries and centers. Institutes are scheduled as follows:

September 21 — October 2, 1964

November 9 — November 20, 1964

January 11 — January 22, 1965

Further information may be obtained from Dr. Hilla Sheriff, Division of Maternal and Child Health, State Board of Health, Columbia, S. C.

Duke Medical Post Graduate Course

For the sixth consecutive year Duke University Medical Center offers a Postgraduate Medical Course to be held at the Morehead-Biltmore Hotel, Morehead City, N. C., July 13, 14, 15, 16, 17, and 18, 1964. The program, while designed primarily for the generalist, is of varied interest to appeal to the pediatrician and internist.

Dr. Moorhead

Samuel H. Haddock, M. D. and Samuel T. Haddock, M. D., F.A.A.P. announce the association of Samuel R. Moorhead, Jr., M. D., F.A.A.P. for the practice of Pediatrics at 107 Calhoun Street, Anderson.

Coastal Medical Society

The Coastal Medical Society met March 19, at the Edisto Restaurant, Jacksonboro, S. C.

Dr. John van de Erve spoke on "Servicing Senile Skin."

At the meeting on April 16, Dr. Clay Evatt, Jr. spoke on "Diseases of the Eye."

SCPHA

The forty-first annual meeting of the South Carolina Public Health Association will be held at the Ocean Forest Hotel, Myrtle Beach, Charles E. Corley, President of the Association, has announced.

The meeting is to be held June 11-13 and will include three general sessions featuring several nationally prominent speakers, as well as various section meetings and entertainment.

The Health Education Section Workshop, usually held in conjunction with the SCPHA, was held March 24-26 at the Francis Marion Hotel in Charleston.

Psychiatry for Internists Added to Postgraduate Course Schedule

A postgraduate course in psychiatry for internists has been added to the list of courses recently announced by the American College of Physicians.

The course—Number 19 on the ACP schedule—will be held June 15-19, 1964, at the Psychiatric Institute and the General Hospital of the University of Maryland School of Medicine. Dr. Ephraim T. Lisansky, Associate Professor of Medicine and Assistant Professor of Psychiatry at the University, is director.

The postgraduate course, titled "Psychiatry for Internists," is part of the American College of Physicians' continuing education program for practicing physicians. Eighteen other courses will be presented under College sponsorship between September, 1963, and June, 1964.

Pediatric Scholarship

The School of Hygiene and Public Health of the Johns Hopkins University announces a residency program in Maternal and Child Health and Preventive Medicine. Its purpose is to prepare a physician for a career in health department work or in a department of preventive medicine or in various combinations. The program runs for two or three years and combines practical experience with an opportunity for research. A beginning stipend is offered of \$400 a month, plus allowances for dependents, tuition, and travel.

Apply to Dr. Paul A. Harper of the above named department, 615 North Wolfe Street, Baltimore, Maryland, 21205.

Dr. A. W. Lowman

In a recent meeting of the staff of Bamberg county doctors, held in Bamberg, Dr. A. W. Lowman, of Denmark, was elected chief of staff of the Bamberg County Hospital for 1964.

Dr. V. P. Patterson

Dr. V. P. Patterson of Chester was one among a group of 16 Scottish Rite Masons of South Carolina who were honored at a dinner given by the Columbia Consistory, Ancient and Accepted Scottish Rites, at the Wade Hampton Hotel on February 29th.

AAPS Members

Request for information, please: If any patients of AAPS members have received letters from the De-

partment of Health, Education and Welfare asking the names of their doctors and their charges, AAPS would like to have the information in detail . . . AAPS member, William R. Craig, M. D., of Greenville, South Carolina, reports that one of his patients, a senior citizen, received such a letter from the Department of HEW . . . The patient promptly replied that it was none of their business and that the (HEW) wanted to socialize everybody . . . Your cooperation will be appreciated.

S. C. Heart Association

Dr. B. M. Montgomery, of Newberry, was elected president of the South Carolina Heart Association at the Association's 15th Annual Meeting at the Greenville General Hospital, Greenville.

Dr. Montgomery succeeds Dr. C. Warren Irvin, Jr., of Columbia, in his newly elected office.

Other officers elected are Dr. John C. Muller of Greenville, vice president; Henry M. Lee of Greenville, secretary; John G. Martin, Columbia, treasurer; and Dr. C. Warren Irvin, Jr., Columbia, chairman of the board.

New directors elected are Dr. Arthur V. Williams, Jr., of Charleston; Dr. Hugh H. DuBose, of Columbia; Dr. J. Roland McKinney, of Greenwood; Dr. George H. A. Clowes, of Charleston; Dr. Richard S. Pollitzer, of Spartanburg; Dr. Lea B. Givens, of Sumter and Miss Mary Ellen Morrison, of Spartanburg.

Re-elected directors are Dr. N. B. Baroody, of Florence; and Thos. H. Pope of Newberry.

Dr. Edward F. Parker was awarded a distinguished achievement medallion.

Dr. Ellis Will Lead Surgeons

Dr. Douglas Ellis of Florence was elected president of the South Carolina chapter of the American College of Surgeons during the group's annual meeting.

More than 60 surgeons from all parts of the state were on hand for the meeting that featured three nationally known cancer authorities.

Dr. Laurence D. Frederick of Rock Hill was elected vice president and Dr. Louie B. Jenkins of Charleston will continue as secretary-treasurer.

Dr. William C. Cantey of Columbia and Dr. Edward F. Parker of Charleston were re-elected as governors on the American College of Surgeons' Board.

The group's 1965 council will include: Dr. Ellis, chairman; Dr. Richard W. Hanckel of Charleston, immediate past-president; Dr. Cantey; Dr. William S. Brockington of Greenwood; Dr. Richard S. Wilson of Spartanburg; Dr. Frederick, and Dr. William Amspacher of Greenville.

Medicine-Religion Conference

A second Conference on Medicine and Religion was held at St. John's Episcopal Church March 31

Recent reports suggest...insulin and sulfonylureas may accelerate lipogenesis,^{1,5}...serum "insulin" levels are often elevated in obese diabetics^{2,3,6}...DBI (phenformin HCl) reduces high blood sugars, lowers elevated "insulin" levels, tends to reduce body weight toward normal.^{1,3,7-9}

most effective in the obese diabetic

DBI®

capsules 25 mg.

DBI-TD®

timed-disintegration capsules 50 mg.

BRAND OF PHENFORMIN HCl

In the obese diabetic (ketoacidosis-resistant), DBI (phenformin HCl) with a proper diet: **A.** acts to reduce high blood sugar without increasing fat synthesis or weight gain. **B.** does not increase already elevated endogenous insulin levels; may, instead, act to restore more normal levels. **C.** favors reduction of weight.

In the ketoacidosis-resistant obese diabetic not amenable to diet alone, hypoglycemic DBI (phenformin HCl) appears to help avoid weight gain or reduce adiposity, factors which otherwise tend to make blood sugar control more difficult and increase the likelihood of complications. However, in the ketoacidosis-prone diabetic, insulin is still the essential hypoglycemic agent.

Summary: Indicated in stable adult diabetes, sulfonylurea failures and unstable diabetes. Gastrointestinal side effects occurring more often at higher dosage levels abate promptly upon dosage reduction or temporary withdrawal. Occasionally insulin-dependent patient will show "starvation" ketosis (acetonuria without hyperglycemia) which must be differentiated from "insulin-lack" ketosis, and treated accordingly. Use with caution in severe liver disease. Not recommended without insulin in acute complications (acidosis, coma, infections, gangrene, surgery). Consult product brochure for full information.

Bibliography: 1. Williams, R. H.: Textbook of Endocrinology, Ed. 3, Saunders, Philadelphia, 1962, p. 610. 2. Gordon, E. S.: Metabolism 11:819, 1961. 3. Grodsky, G. M. et al.: Metabolism 12:278, 1963. 4. Sadow, H. S.: Metabolism 12:333, 1963. 5. West, K. M. and Tophoi, E.: Metabolism 39, 1961. 6. Yalow, R. S. and Berson, S. A.: Diabetes 9:254, 1960. 7. Weller, C. et al.: Scientific Exhibit, A.M.A., June 1962. 8. Weller, C. et al.: Metabolism 11:1134, 1962. 9. Radding, R. S. et al.: Metabolism 11:404, 1962.

S. VITAMIN & PHARMACEUTICAL CORPORATION 800 SECOND AVENUE
NEW YORK N.Y. 10017

for all ministers and physicians in Florence County.

The conference was a follow-up to the first one, held last October. It was sponsored by the Florence County Medical Society, the Florence Pastor's Conference, and the Florence County Association for Mental Health.

The theme was "The Clergyman and Physician: A Healing Team?"

What Goes On in the Public Health Mind?

From *Public Health Reports* of March, 1964* we cull the following:

"In the continental United States the many agencies, each with its own objectives and policies, are a continuing challenge to the development of regional services. Private control of hospitals and other social institutions, distribution of responsibilities among the three levels of government, and separation of public health and medical care are not only barriers to reorganization of services but they discourage the one agency, the public health department, which should assume leadership and responsibility, Rosenfeld stated.

"Rosenfeld suggested two forms of action which may hasten progress. One is greater support for planning and development of regional services. Support, at a relatively modest level compared with costs of providing services, could do much to encourage medical schools, hospital organizations, community agencies, and public health departments that are interested in more effective organization of services. The

most effective source of such support, he said, would be Federal grants-in-aid to States."

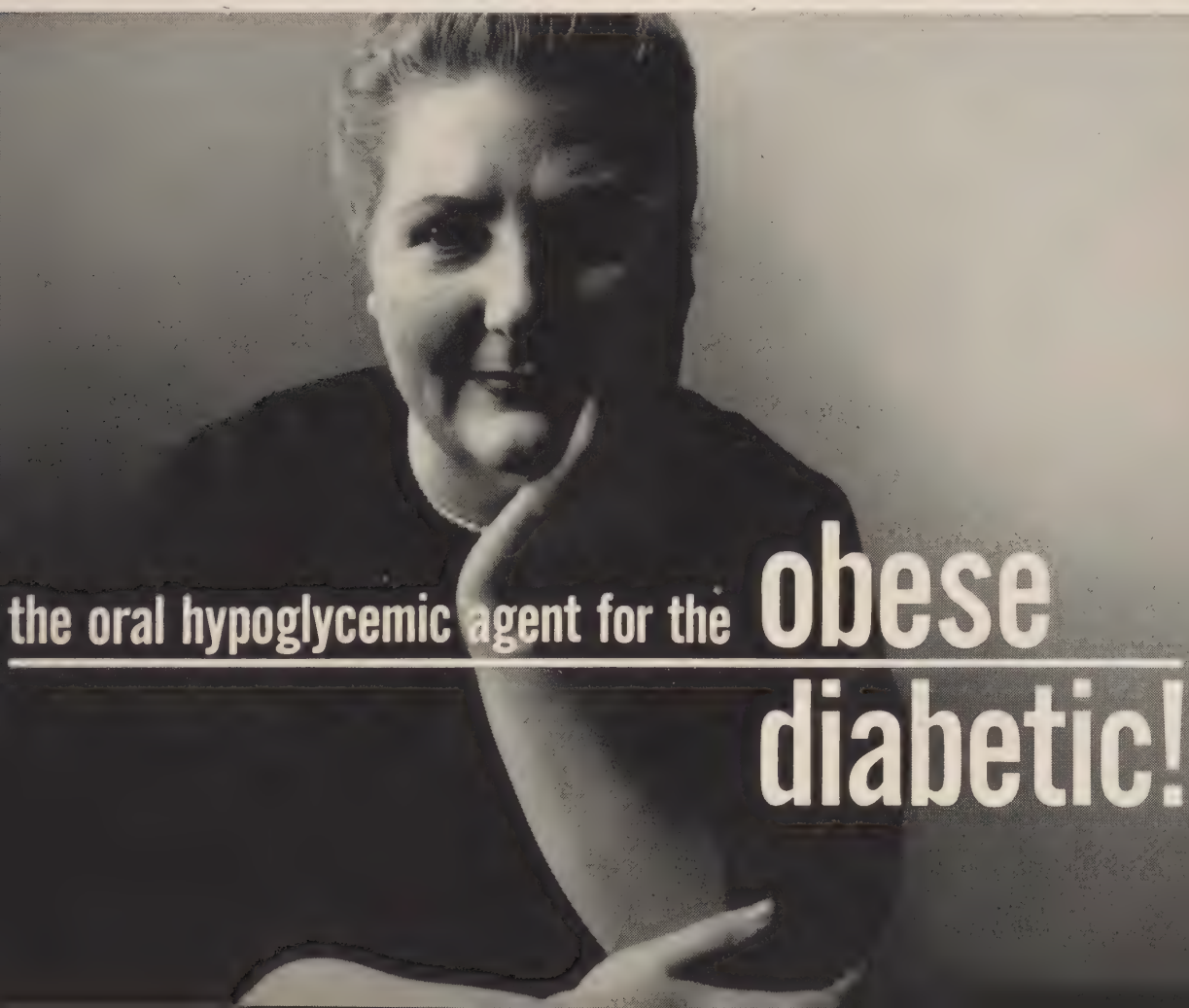
"Although preventive supervision should be an essential attribute of medical care, it is more honored in the breach than in the observance, Terris said. One of the reasons for this deficiency is insufficient education of the public as to the need for further care after the acute attack has subsided. Another is the fee-for-service method of payment to practitioners which erects a formidable barrier to continuing costly care. Associated with this kind of payment is the ethical prohibition against soliciting patients' visits.

"Terris believes preventive supervision in the non-infectious diseases will not become fully available to the public until basic changes are made in medical education, other methods are substituted for fee-for-service payment, and medicine is practiced in groups based in health centers that include a full complement of public health nurses and social workers."

*Public Health Reports 79:226-227.

Health Mobilization Training Course Scheduled

A State Health Mobilization Training Course sponsored by South Carolina State Board of Health, South Carolina Civil Defense Agency, co-sponsored by the Veterans' Administration Hospital of Columbia, South Carolina and in cooperation with U. S.



the oral hypoglycemic agent for the **obese
diabetic!**

Department of Health, Education and Welfare, Public Health Service, Region IV, Health Mobilization Services and Communicable Disease Center Training Branch, Health Mobilization Training Section, Atlanta, Georgia, is scheduled to be held at the Veterans' Administration Hospital, Columbia, South Carolina June 9 and 10.

Purpose of The Course

This Health Mobilization Training Course is designed to provide a better understanding and to acquaint physicians, dentists, veterinarians, nurses, pharmacists and other members of the health team about their primary and responsible roles in emergency health preparedness.

We in the health service have a vital role and responsibility within the State and community emergency health organization. We know that in disaster situations, the health service is the instrument through which are applied all available community health resources—manpower, supplies and facilities. We also realize that the medical profession is primarily responsible for developing and preparing emergency health service plans during and following a disaster and that we form the leadership in all phases of emergency health operations.

Hopefully, we anticipate that through the knowledge and understanding gained by attendance at this course, members of the health team will return to their communities and participate actively in all phases of the important Health Mobilization Program and establish or strengthen leadership in emergency health service plans, programs and activities.

Remember — Total emergency preparedness is based on individual and group self-sufficiency — health mobilization training and programs aid in achieving these requirements.

2nd Hawaii Seminar, June 26-July 1, 1964

As you may have read in the Journal of the American Medical Association, the Hawaii Medical Association will again sponsor a Seminar directly following the 1964 AMA San Francisco Convention.

Complete details can be obtained from the:

Hawaii Medical Seminar
Suite 300
1612 K Street
Washington, D. C. 20006

New Members of SCMA

Dr. Arthur M. DeCamps
Johnsonville, S. C.
Dr. Bert V. Gue
Orangeburg, S. C.
Dr. D. O. Holman
Timmons ville, S. C.
Dr. David C. Hull
Spartanburg, S. C.
Dr. Jean B. Laborde, Jr.
Columbia, S. C.
Dr. James E. McFadden, Jr.
Hemingway, S. C.
Dr. Vernon E. Merchant
Anderson, S. C.
Dr. Rhett B. Myers
Moncks Corner, S. C.
Dr. Thomas C. Rowland
Rockville, Maryland
Dr. F. Grayson Shaw
Camden, S. C.
Dr. George F. West
Camden, S. C.
Dr. Robert T. Whitehead, Jr.
Lake City, S. C.

Deaths

Dr. N. C. Brackett

Dr. Newton Craig Brackett, 68, of Pickens died in a Pickens Hospital following a brief illness.

Dr. Brackett was born in Clemson and was graduated from Clemson College in 1916. He served in World War I in the U. S. Army and was graduated from the Medical College of South Carolina in 1925. He served his internship at Roper Hospital in Charleston.

Dr. R. D. Hill

Dr. Robert Dennis Hill, 65, who took up the practice of medicine in Pacolet 37 years ago, died at his home after a brief illness.

A graduate of Wofford College in 1918, after

serving in World War I, Dr. Hill then graduated from the Medical College of South Carolina in 1923. He was a native of Bishopville.

In 1953, he was doctor of the year, honored by the Spartanburg County Medical Society.

Dr. Edward Carter

Dr. Edward Peebles Carter, 87, died March 19 in Riverside Convalescent Home in Charleston after five months illness.

Dr. Carter was born in Bamberg County January 8, 1877. He graduated from the University of S. C. in 1897 and the Medical College of South Carolina in 1901. He made his home in Ashton where he practiced medicine for more than fifty years.

NURSING EDUCATION TODAY

Role of South Carolina Board of Nursing

J. DECHERD GUESS, M. D.

Greenville, S. C.

Neither legislators, lawyers, nor doctors are familiar with the laws governing nursing in South Carolina. These laws were published in pamphlet form in 1960. They were taken from the "Code of Laws of the State of South Carolina, 1952, as amended by Act. No. 176 of 1959." Included in the pamphlet are rules and regulations which have been adopted by the State Board of Nursing and which have the full force and effect of law (56-966).

To understand fully the legal status of the State Board of Nursing and the power which it wields on nursing education and nursing services in South Carolina, I shall review the pertinent provisions of the law. It should be kept in mind that in every instance where "accreditation" of schools is referred to, the reference is to state approval, or accreditation. Accreditation by the National League of Nursing, is extra-legal, and of course, is not referred to in the state law. That the South Carolina law uses the term accredited to refer to state approved schools of nursing is at times confusing to prospective students and to others. Even the Governor, early in his administration, is reported to have said that there are only three accredited schools of nursing in the state. He, of course, was referring to National League accreditation, but he failed to make the reference clear.

All italics in quotations from the law and regulations are the author's and are used for emphasis.

Article I

"56-951. Definition of registered nurse.

"Any person shall be regarded as a 'registered nurse,' within the meaning of this chapter, who has graduated from an accredited school of nursing, as provided in this chapter (56-1013), has passed a satisfactory examination before the State Board of Nursing (the Board) and has complied with all other requirements of this chapter.

"56-954. No provision . . . shall be construed: . . . (4) as *prohibiting the practice of nursing by students enrolled in accredited schools of nursing . . .*"

Article II

"56-961. Associations entitled to representation on Board; qualification of members.

"The Board shall be composed of five persons to be appointed and commissioned in the following manner:

"The South Carolina State Nurses' Association shall be entitled to two representatives . . . who shall

This is the fourth of a series of articles dealing with modern nursing and nursing education. The fifth and last article will appear in an early issue.

—The Editor.

be members of the Association and who must have had at least three years of practice in their profession immediately preceding their appointment.

"The South Carolina Medical Association shall be entitled to two representatives . . . who must have had at least three years of practice in their professions (sic) immediately preceding their appointment.

"The South Carolina Hospital Association shall be entitled to one representative . . . who shall be a registered nurse of South Carolina, a member of the South Carolina State Nurses' Association, and a graduate of a school of nursing not already represented on the Board.

"56-964. *Officers of the Board.* The officers of the Board shall be a president and secretary-treasurer, both of whom shall be chosen from the members *who are nurses*. . . . The officers shall serve for a period of one year each. . . . *Officers shall be elected by the Board annually.*

"56-965. *Executive Director; Other Employees.* The Board shall appoint and employ a qualified person to serve as executive director. . . . The salaries and necessary expenses incurred in the performance of their duties shall be paid out of funds held by the Board. . .

"56-967. *Seal; Rules and Regulations; Fees.* . . . It (the Board) *may make such rules and regulations as it may deem necessary for the purpose of carrying out the provisions of this chapter* and shall fix such fees as it may deem necessary.

"56-970. *Use and Disbursement of Funds.* All moneys received in excess of the mileage and per diem allowances of the members shall be held by the Board as a special fund for meeting its expenses, carrying out provisions of this chapter, and for the promotion of nursing education and good standards of nursing care in this state."

Article III

Registration of Nurses

"56-982. *Examinations and Certificates of Registered Nurses.* "The Board shall examine all candidates for registration, as herein provided, and pass upon their qualifications and fitness to practice as registered nurses in this state. . . .

"56-983. *Qualifications of Applicants.* Each applicant shall furnish evidence satisfactory to the Board that he . . . has completed the course of study in an accredited school of nursing and holds a diploma therefrom. . . ."

Article V

Examinations

"56-1002. Each applicant must pass examinations

conducted by the Board which may be written, oral, by practical demonstration, or by a combination of any or all of these methods in *such subjects as may be determined by it.*

"56-1004. *Suspension or Revocation of License.* The Board may suspend or revoke by a majority vote of its total membership, subject on appeal, to review by the courts of the state, the license of any registered nurse . . . qualified under provisions of this chapter. . . ."

Article VI

Schools of Nursing

"56-1011. *Relations with Schools of Nursing.* The Board shall register as accredited such schools of nursing as shall meet *the requirements of the Board* as to courses and standards. *It shall prescribe curricula and standards for schools and courses* preparing persons for registration or licensing under this chapter. It shall provide for surveys of such schools and courses at such times as it may deem necessary. It shall accredit such schools *as meet the requirements of this chapter and the Board.* . . .

"56-1014. *Periodic Surveys of Nursing Schools.* survey of the institution or institutions with which the school is to be affiliated shall be made by the executive director or other employee of the Board and a written report of the survey shall be submitted to the Board. If, in the opinion of the Board, the requirements for an accredited school of nursing are met, it shall approve the school as an accredited school of nursing.

"56-1014. *Periodic Surveys of Nursing Schools.* From time to time, as deemed necessary by the Board, the Board, *through its executive director*, or other employee, shall survey all schools of nursing in the state. Written reports of such surveys shall be submitted to the Board. If the Board determines that any accredited school of nursing is not maintaining the *standards required by the statutes and by the Board*, notice thereof in writing specifying the defect or defects shall immediately be given to the school. A school which fails to correct such defects to the satisfaction of the Board within a reasonable time shall be removed from the list of accredited schools of nursing."

Rules and Regulations

"The State Board of Nursing is designated by law as the administrator of the Act governing nursing in South Carolina. *It is empowered by Section 56-967 of the S. C. Code of 1952, as amended by Act 170 of 1959, to make such rules and regulations it may deem necessary to carry out provisions of the Act.*"

The Board has adopted 25 such regulations. Most of these regulations have one or more subdivisions. Each regulation has the force of enacted law. I shall quote in whole or in part those regulations which apply to regulation of schools of nursing, examination of applicants for licensure, etc.

"Regulation No. 1. Responsibilities.

"1.3. Delegation to the executive director responsibility for overall management of the work of the Board.

"1.8. *Preparing*, reviewing, and administering examinations leading to license.

"1.10. Setting standards and policies for accreditation of schools of nursing. . .

"1.11. Giving educational guidance to schools of nursing.

"1.12. Hearing reports of surveys of schools of nursing. . . . , ruling on the status of accreditation of such schools . . . and evaluating applications from institutions wishing to initiate schools.

"1.15. Cooperating with nursing and related organizations and health agencies for the promotion of good standards of nursing education and nursing care. . ."

Regulation No. 4.

"4.1. The Board accepts the code of ethics for professional nurses . . . as guides for standards of practice . . . *however, without limiting the definitions of such practice to the terms of such codes.*"

"4.2. A code for professional nurses (adopted 1950 by the South Carolina State Nurses' Association):

"Professional nurses minister to the sick, assume responsibility for creating a physical, social, and spiritual environment which will be conducive to recovery. . .

"They render health service to the individual, the family and community and coordinate their services with members of other health professions involved in specific situations.

"Service to mankind is the primary function of nurses. . .

"A nurse recommends or gives medical treatment without medical orders *only in emergencies and reports such action to a physician at the earliest possible moment.*

"The nurse is obligated to carry out the physician's orders intelligently, to avoid misunderstanding or inaccuracies by verifying orders. . .

"The nurse sustains confidence in the physician and other members of the health team."

"Regulation No. 5.

"5.1. Professional nursing: The practice of professional nursing means the performance for compensation of any act in the observation, care, and council of the ill, injured, infirm, or in the maintenance of health, or prevention of illness of others, or in the supervision and teaching of other personnel, or the administration of medications and treatments prescribed by a licensed physician or licensed dentist; *requiring substantial specialized judgment and skill* as based on knowledge and application of the principles of *biological, physical, and social sciences. The foregoing shall not be deemed to include acts of diagnosis or prescription of therapeutic or corrective measures.*"

"Regulation No. 11. Examinations.

"11.1. Examinations for certification as registered nurse . . . are based upon information and judgment needed in nursing situations, and candidates are ex-

aminated also on the social, physical, and biological sciences as they apply to medical, surgical, obstetric, and psychiatric nursing and nursing of children."

"Regulation No. 18. *Survey and Accreditation Programs.*

"18.2. The purpose of the accreditation process is to assist educational units in nursing to attain excellence in their programs of preparation of individuals for the practice of nursing and to designate to the public those schools and courses which give evidence of preparation of competent practitioners, and which merit recognition of the Board.

"18.3. The accreditation procedure is designed with an objective of helping educational units in nursing to plan and evaluate their own resources, goals, progress, and methods of operation. The State Board of Nursing judges an educational unit on the basis of the *competence of its faculty, its methods of self-evaluation, its accomplishments to date, its present degree of excellence, the use that it is making of resources and potentialities* for further development.

"18.4. The faculty should from time to time, at regular intervals, assess the program in light of *objectives that it has agreed upon*. What evidence is there that:

"a. *The stated purpose of the educational unit is a worthy and realistic one?*

"b. *The program of instruction is geared toward fulfillment of the stated purpose?*

"c. *The faculty as a group and as individuals are in accord with the stated philosophy?*

"d. *Each member of the faculty is fitted professionally and personally to perform functions that have been defined for her?*

"e. *Each member of the faculty is prepared and willing to play her role in evaluating and developing further the needed improvements in the educational program?*

"f. *Students selected for admission to the educational unit in nursing possess demonstrated ability and a level of maturity necessary to carry successfully the educational program that has been designed for them?*

"g. *The general and clinical facilities are suitable for a dynamic educational program in nursing, and the proper use is made of resources?*

"h. *Graduates of the educational unit in nursing are gainfully employed in positions in which they are making a worthwhile contribution, and from which they are deriving satisfaction.*

"18.5. *Survey:* The survey of the educational unit in nursing is an evaluation tool which operates throughout the year, and the process includes collection and interpretation of data, consultation and observations and information at the time of the annual visit.

"18.6(c). *Initial Accreditation:* An institution desiring to develop an educational unit in nursing must first request advice of the Board in regard to basic essentials for developing and operating such

a unit . . . *A written statement of reason for desiring to establish an educational unit in nursing, and of financial and clinical resources* must be submitted . . . When it (the Board) has determined that the situation is appropriate for the establishment of a sound educational unit . . . the institution is furnished forms on which to make application for permission to start an educational unit. . ."

"Regulation No. 19—*Basic standards to be met by an educational unit in nursing accreditation:*

"19.1. A sound organizational structure and good administration practices.

"19.2. Financial resources sufficient to give assurance of stability of program, educational resources, and qualified administrative and instructional personnel.

"19.4. *A sound educational philosophy stated in terms which express convictions of the controlling authority and the faculty of the educational unit in regard to the need for high standards of practice and for high standards of preparation for the practice of nursing.*

"19.5. *A definitive statement of purpose.*

"19.6. A curriculum built upon sound educational principles, *one which reflects the stated philosophy and purpose of the educational unit regarding sound preparation for nursing, and which assures an appropriate balance of classwork and nursing practice throughout the program.*

"19.7. *Sound methods and systematic practices of evaluating success of the educational program in terms of its stated purpose."*

"19.8. *Established policies regulating the grading system, testing program, class and experience attendance, promotion, and graduation.*

"19.9. *A faculty organization which functions in accordance with rules which provide regular meetings and committee activity directed toward advancing the aims of the educational unit in nursing.*

"19.10. *Faculty members with preparation for teaching in areas in which they are employed to function, and sufficient in number appropriate to the design of the program and the size of the student enrollment.*

"19.11. *Employment conditions and aides to faculty growth which are in line with current practices.*

"19.12. *Written job descriptions for instructional personnel which show evidence of activities appropriate to good teaching in the classroom and in the clinical nursing practice situation.*

"19.13. *Standards for the admission of students which include a testing program and selective devices which give assurance of a choice of students appropriate to the requirements of the educational program.*

"19.14. *A program of guidance and personal practices which permits a balance of class work, study, clinical experience, recreation and rest.*

"19.15. *Where dormitories are provided, housing facilities and their supervision are conducive to*

health, recreation, and gracious living.

"19.16. Offices, classrooms, laboratories, and library are properly located, and are adequate in furnishings and resources for the size of the educational unit and type of program.

"19.17. Hospital resources . . . are conducive to good learning experience in nursing."

Regulation No. 20.

"Should an educational unit desire to change the length, design, or pattern of its (already existing) program, the administrative authority . . . must first submit a written detailed description of the proposed plan . . . and must secure the approval of the Board for the change before it is put into operation."

Regulation No. 21. *Experimental Programs.*

(Before undertaking an experimental program) . . . "an educational unit . . . must:

"21.1. Consult a representative of the . . . Board . . . for a discussion of ideas—

"21.2(b). Prepare a statement . . . as to the name and qualifications of the person who will be responsible for the experimental process and its evaluation.

"(c). Give information as to the anticipated cost of the experiment and the source of the funds.

"(d). Give evidence that the experiment will be conducted on a scientific basis with accurate and full recording and periodic reporting.

"(e). Give full information as to the evaluating methods to be used."

Regulation No. 22. *New Education Unit in Nursing* (65-1016)

"The following steps must be taken by an institution which desires to establish an educational unit in nursing:

"(a). Request advice of the . . . Board . . . as to basic essentials for establishing . . . the (proposed) unit. . .

"(b). Submit a written statement of reason for desiring to establish . . . (the unit).

"(c). Submit a . . . statement of financial and clinical resources . . .

"(d). Request a survey visit from the . . . Board and file an application . . . when so advised. . ."

Regulation No. 24. *Student Practice* (56-954, 4)

"Students of nursing cannot be employed as nurses, but may practice as part of their . . . training."

(Note: This regulation in effect repeals Article 1, Act 56-954, paragraph 4 of the statutes.)

These long, boring, unnecessarily repetitious, and fearsomely detailed provisions of the Nursing Practice Acts and regulations to implement them provides an example of bureaucracy at its worst.

The hand of the Board, and behind it the thinking of the National League for Nursing, is clearly visible in the wording and the provisions of the law itself. The regulations are admittedly the brain child of the Board. Their formulation is a glaring example of verbosity, faulty composition, and difficulties in communication.

The author might be criticized for quoting the law and the regulations at such length instead of being content to briefly summarize them and give references. There are, however, realistic reasons for what he has done. They are: doctors are in the mood to begin to try to do something to loosen the vice-like hold on nursing education and the "brain washing" efforts of certain leaders in nursing education to change and to direct the attitudes of nurses toward the medical profession. To make a beginning, such an effort will require that doctors understand fully the basis of the power of the National League of Nursing.

The recommendation of the Committee on Nursing of the Board of the Medical College, namely, that the State Board of Nursing be increased to nine members, with four nurses and four doctors, and one member of the South Carolina Hospital Association making up its personnel, if adopted, might be a feeble beginning of a difficult undertaking.

A similar suggestion by the Committee on Nursing of the South Carolina Medical Association has been made.

Aggressive and concerted action by the staffs of all hospitals, with the cooperation of county medical societies, and the solicitation of legislative delegations to support efforts to change the law, so that doctors will regain some advisory powers in nurse training and which would curtail the unsupervised, autocratic powers of the Board of Nursing to regulate the administration of the Nursing Act might result in some degree of lessening of those powers.

The Board of Nursing now controls in minutest detail the operation of all schools of nursing. Its power takes precedence over that of the Board of Trustees and the faculty of the University of South Carolina in matters pertaining to the School of Nursing of the University. The same is true in the case of Lander College, an independent college. It is also true of the board of control of every hospital which operates, or wishes to operate, a school of nursing.

The Board of Nursing must approve the curriculum, the lecture and laboratory hours, the amount of experience in the nursing arts, the qualifications of each member of the faculty, and the number of faculty members employed, the details of the financial resources of each school, and the living conditions of the students. It requires a report on living alumnae of each school as to whether they are gainfully employed, . . . making a worthwhile contribution, and are deriving satisfaction from their work.

Control of these matters has been assumed by a Board of five members and an executive secretary, who although not a member of the Board, has great powers of advocacy and persuasion, and of bias, since it is she who makes the inspections and writes the reports.

The two physicians on the Board of Nursing are definitely a minority, and at times have been made to feel that they were merely tolerated rather than

that their opinions were worthy of discussion or consideration.

As I see it, the most important objective right now is to bring about a rewriting of the regulations, converting them into a statement of general principles rather than detailed, impossible, minuscule regula-

tions which place schools in a strait jacket and destroy all initiative. The schools should be returned to their own boards of control and to their own faculties. Very simply stated and rather general regulations embodying general principles should apply to qualifications for accreditation.

From the report of the Committee on State-Wide Polio Immunization Program.

A Record of Polio Immunizations By
County in South Carolina

County	1960	Type I	Type III	Type II
	Population			
Abbeville	21,417	15,000	16,000	15,500
Aiken	81,038	67,500	65,600	64,000
Allendale	11,362	10,100	11,000	11,000
Anderson	98,478	66,000	72,500	74,400
Calhoun	12,256	7,900	7,700	7,800
Cherokee	35,205	22,600	21,300	20,800
Chesterfield	33,717	24,200	24,800	24,300
Clarendon	29,490	23,200	23,100	22,400
Darlington	52,928	47,700	46,600	45,600
Dillon	30,584	22,500	21,100	21,200
Edgefield	15,735	12,900	13,300	13,500
Fairfield	20,713	16,200	17,800	17,600
Florence	84,438	77,500	75,700	75,000
Georgetown	34,798	23,800	22,700	22,100
Greenville	209,776	180,200	193,300	202,600
Greenwood	44,346	46,000	46,600	45,600
Horry	68,247	50,400	47,200	48,700
Kershaw	33,585	27,400	25,300	28,200
Lancaster	39,352	29,100	28,800	28,900
Laurens	47,609	30,200	33,300	33,600
Lee	21,832	14,900	15,700	16,600
Lexington	60,726	51,000	52,500	53,800
McCormick	8,629	6,200	6,400	6,100
Marion	32,014	27,200	26,800	26,200
Marlboro	28,529	13,400	14,200	13,700
Oconee	40,204	26,400	24,300	25,700
Pickens	46,030	33,200	39,400	39,900
Richland	200,102	185,000	183,900	190,000
Saluda	14,554	13,800	13,800	13,800
Spartanburg	156,830	105,900	111,600	116,100
Sumter	74,941	50,700	49,200	48,800
Union	30,015	26,500	25,600	25,400
Williamsburg	40,932	30,400	30,000	28,700
York	78,768	65,000	63,030	62,600

Previous	Approximate Number	
Campaigns	of Persons Immunized	
Bamberg	16,274	9,700
Barnwell	17,659	12,400
Beaufort	44,187	26,000
Berkeley	38,196	27,000
Charleston	216,382	185,000
Chester	30,888	10,000
Colleton	27,816	23,300
Dorchester	24,383	20,200
Hampton	17,425	14,500
Jasper	12,237	10,000
Newberry	29,416	19,100
Orangeburg	68,559	55,000

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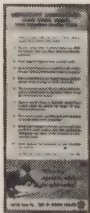
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Book Reviews



CURRENT THERAPY 1964, Edited by Howard F. Conn, M. D. W. B. Saunders Company, Philadelphia and London. 1964. Pp. 797. \$13.00.

This is an excellent reference book which covers a wide variety of diseases. In keeping with our present vast and varied scientific world, it is impossible for one or a small group of men

to cover the field of therapeutics, and there are a large number of authoritative contributors who write on different topics. It is of interest that there are at least three from South Carolina: Dr. Louis Jervey, Jr. and Dr. Clarence Legerton of Charleston and Dr. Paul Switzer of Union. Dr. Samuel F. Ravenel, a former South Carolinian, who now resides in Greensboro, N. C. is another contributor.

A review of the therapeutic agents and methods advocated through the text of this book show sound and conservative medical knowledge, but in a book of this sort it is never possible to be complete. The practicing physician may well use this as a reference, to remind himself of many of the facets of therapy which he may for the moment have forgotten, but one must always remember that medicine is never static and that even when a book goes to press some new fact may well have misplaced an outworn idea. While books are excellent for reference, they can never replace the necessity for keeping up with the latest developments in recently published journals.

Robert Wilson, M. D.

CANCER OF THE STOMACH, by W. ReMine, J. Priestley, J. Berkson, and Members of the Staff of the Mayo Clinic. W. B. Saunders Company, Philadelphia and London. 1964. Pp. 255. \$11.50.

This relatively small volume gives the experience of the Mayo Clinic in the treatment of cancer of the stomach. Under the various headings it gives a historical sketch and a brief review of the literature. Chapters on diagnostic procedures and pathology are contributed by members of the Mayo Clinic Foundation. The results of treatment are analyzed statistically. Total gastrectomy is advocated in selected cases; in their series there is a 9.9% of five year survival. The general health was good in 76%. Three fourths developed anemia, but responded well to medical treatment. Improved results will depend upon a higher incidence of early diagnosis, rather than upon a more extended operation.

W. H. Prioleau, M. D.

A HISTORY OF MEDICINE IN SOUTH CAROLINA 1670-1825 by Joseph Ioor Waring, M. D. The R. L. Bryan Company, Columbia, South Carolina, 1964. Pp. 407. \$7.50.

It may sound trite to state that this work fills a long felt want. But such is the case, for it is the very first of its kind. Of course, there have been some words and a few paragraphs on South Carolina in publications on the medical history of America previously, but at no time has there appeared a book so detailed, so accurate and comprehensive as this. Indeed, it deals with a long neglected field.

Naturally it is rather difficult not to become too enthusiastic in reviewing a volume such as this, for it brings to light much that hitherto has been hidden in libraries, in newspapers, or in personal correspondence.

At the outset of this review or evaluation of Dr. Waring's history, it should be stated that in his excellent foreword Richard H. Shyrock, Ph. D., Professor Emeritus of the History of Medicine at the Johns Hopkins University, calls attention to the fact that until now there has not been a medical history of South Carolina. Among other things, Dr. Shyrock points out that it was not until 1824 that a medical school was established in Charleston, long after the first American one in 1765. Dr. Waring has chosen to terminate the first volume with 1825, a date just after the opening of the Medical College of South Carolina.

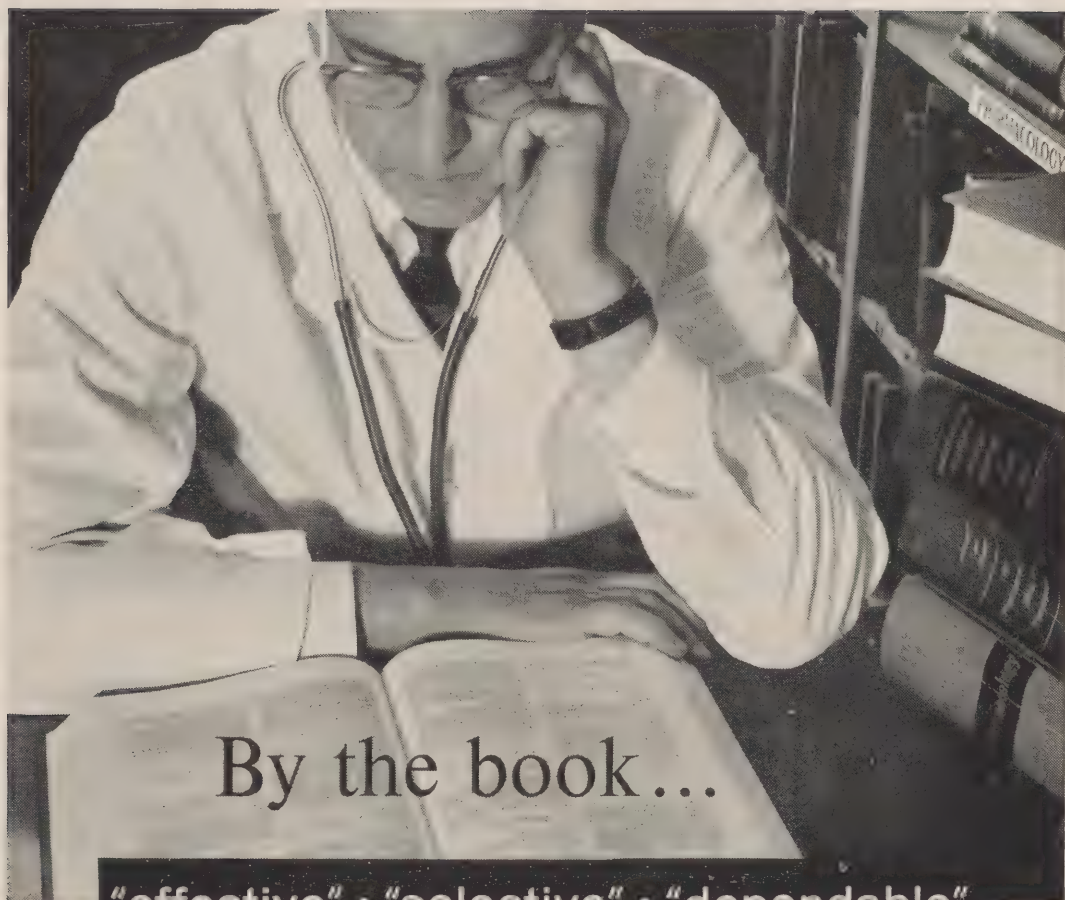
This important volume, the brain child of Dr. Waring, has a preface, 13 chapters and over 50 illustrations, many of which are of ancient vintage and some rarity. Further, this work has a number of biographies, numerous references and an appendix.

Many of the biographical sketches are of great interest and also very informative. Some are brief and others detailed. While tastes vary, to me the most appealing are those of Lionel Chalmers, Alexander Garden, John Lining, David Ramsay, and Robert Wilson.

Regardless of whether the reader be a professional historian or one interested in American medical history, this product of Dr. Waring's research and facile pen should not be neglected. A delightful feature of this work for one interested in history is that one may read in this volume many of the original descriptions of epidemics, the kind and variety of illnesses, as well as the severe damage to Charleston, in its early days, by fire, flood and storm, as well as the many and varied hardships that the early colonists had to endure.

It is only fair to warn the reader that once he has begun to read this interesting and valuable volume, it is extremely difficult to lay it aside.

R. M. Pollitzer, M. D.



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PSYCHOANALYTIC EDUCATION. Edited by Jules H. Masserman. Science and Psychoanalysis. Volume V. Grune & Stratton, New York - London - 1962. \$9.75.

The Academy of Psychoanalysis, whose Chairman of the Publication Committee is Jules H. Masserman, M. D., has since 1958 issued a yearly volume of Science and Psychoanalysis. Volume V, Psychoanalytic Education, is the fifth volume in this series. It is a compilation of papers secured from 29 well-known psychiatrists, psychoanalysts, and social scientists. The Academy of Psychoanalysis "was organized to constitute a forum for inquiry into the phenomenon of individual motivation and social behavior, to support research in psychoanalysis, and to further the integration of psychoanalysis in undergraduate and graduate medical education." (Merin) Its membership "is composed of individual psychoanalysts and scientific associates and has no affiliation with institutes or training programs." (Grinker) The book is divided into four sections; "theoretical context, processes and concepts, techniques of training, and, social and clinical applications." In each of these parts several papers are presented by competent authors. Roy R. Grinker, Sr., M. D. in his introductory paper gives a sage comment "no applied science such as is therapy can exist for long without continued modifications of methods and an accretion of new hypotheses." He additionally stated "psychoanalysis as a science or psychoanalysts with a scientific attitude are only possible if controversy is encouraged and the now rigid boundaries of the field opened to concepts and methods of other disciplines." All of the papers will be of interest to psychiatrists and of special interest to those practitioners of psychoanalysis, intensive psychotherapy, and relevant social scientists.

The generalists will find some clarifications and helpful viewpoints in the papers on: "Disturbed Behavior On Medical and Surgical Wards, A Training and Research Opportunity, Identity, A Re-evaluation of Some Aspects of Femininity Through a Study of Menstruation; A Preliminary Report, and Recent Advances in Biological Sciences Pertinent to the Study of Human Behavior."

R. Ramsey Mellette, Jr., M. D.

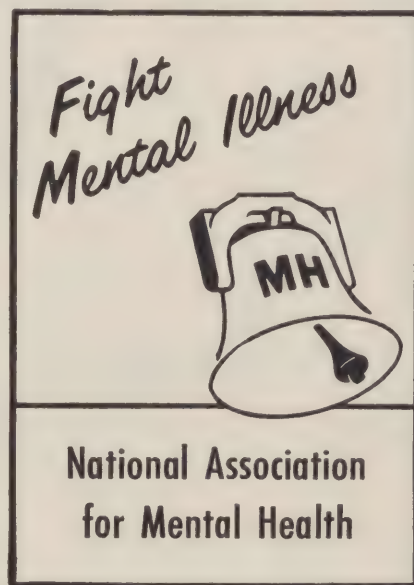
FLUIDS AND ELECTROLYTES IN PRACTICE. By Harry Statland, M. D. 3rd edition. 329 pages. Lippincott and Co. Philadelphia, 1963. \$8.50.

The third edition of this book is presented to bring its contents up to date. It is intended as a primer in fluid therapy for the medical tyro and for the practitioner not involved daily with problems in fluid and electrolytes.

The contributors to the sections on surgical patients, pediatric fluid balance and special problems in internal medicine are well qualified and their offerings cover the latest information.

The book is very clearly written and the coverage is complete if not in depth. It is especially recommended for the student beginning his study of fluid balance.

Louie B. Jenkins, M. D.



PROGRESS IN GYNECOLOGY, VOLUME IV, by Joe V. Meigs, M. D. and Somers H. Sturgis, M. D. Grune and Stratton, New York, 1963. Pp. 676. \$16.75.

Progress in Gynecology is an unusual book. The first volume was published in 1946 for the purpose of bringing up to date those men who had spent the last years in the Armed Forces, away from the practice of gynecology. In it a group of 71 contributors presented gynecologic subjects of interest to all. In the ensuing years Volume 2 and Volume 3 were published, following a similar format. These three earlier volumes continue to be valuable reference books in the field of gynecology.

Volume 4 is, as the term indicates, the fourth volume in a series and not a new edition. This volume, with articles by some of the original contributors and many other outstanding gynecologists, updates many of the subjects presented in the earlier volumes and contains new subject matter.

Meigs and Sturgis deserve considerable credit and commendation for selecting and editing this outstanding series of articles. In our opinion this is the best volume of Progress in Gynecology since the publication of Volume 1. It contains a comprehensive survey of current gynecologic matters. It should be available to all physicians interested in gynecology, endocrinology, sterility and female carcinoma whether they are practicing gynecology as a speciality or as a part of a broader practice.

David F. Watson, M. D.

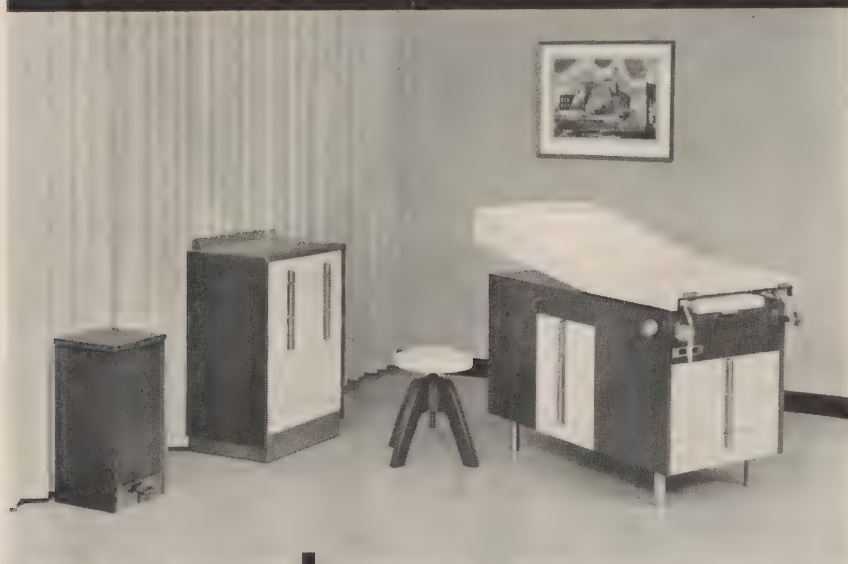


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patients with suicidal tendencies. Massive overdosage of meprobamate may produce lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse. Even though it has not been reported with 'Deprol', consider the possibility of dependence, particularly in patients with history of drug or alcohol addiction; withdraw gradually after prolonged use at high dosage. *Complete product information available in the product package, and to physicians on request.*

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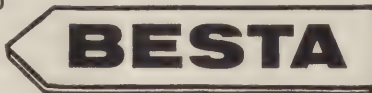


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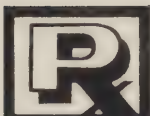
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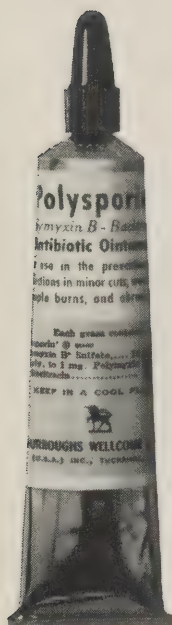
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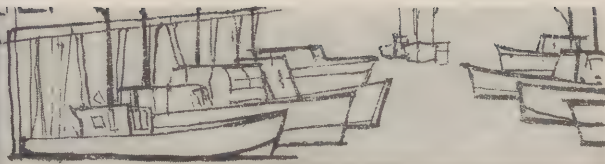
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AMA

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Chapter VI. Meetings-Section 2. Registration (A) Members-Active Member's Section registration shall correspond with his specialty or General Practice status as designated by him for classification in the American Medical Association Directory. To be accepted for Section registration purposes, a member of a Section who desires to change his registration from one Section to another because of a change in his specialty, shall be

required to inform AMA Headquarters by written notice of this intention at least *sixty* days in advance of the Annual Convention.

Chapter VII. Sections-Section 7. Participation in Business Only *active members* registered in accordance with Chapter VI, Section 2 (A) shall have the right to participate in the *business deliberation* of a section.

Please Note

An Active Physician Member may not *change his Section* registration for voting purposes from one Section to another Section, unless written notice of a change in his specialty has been given the AMA Headquarters at least 60 days in advance of the opening day of the Annual Convention.

Upon completion of an Active Member's Registration at the AMA Registration Desk, members registering in advance and members registering for the first time will not be permitted to switch from one Section registration to another Section registration during the entire period that the AMA Annual Convention is in session.

However, all members are encouraged to attend any and all of the Scientific Section programs. Such attendance has no direct connection with the Section in which an Active Member may wish to be qualified to vote.

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- ☐ Diseases of the Chest
- ☐ Experimental Medicine and Therapeutics

- ☐ Gastroenterology
- ☐ General Practice
- ☐ Internal Medicine
- ☐ Laryngology, Otology and Rhinology
- ☐ Military Medicine

- ☐ Nervous and Mental Diseases
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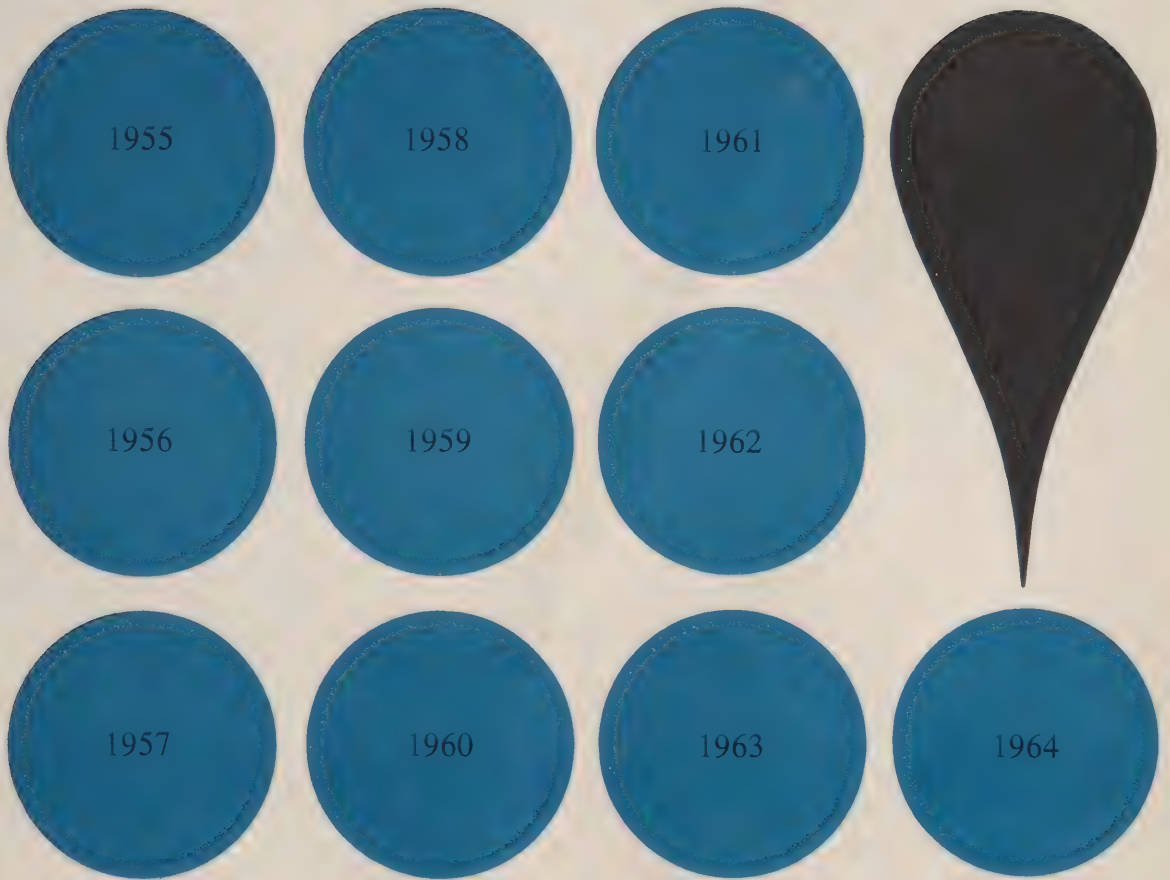
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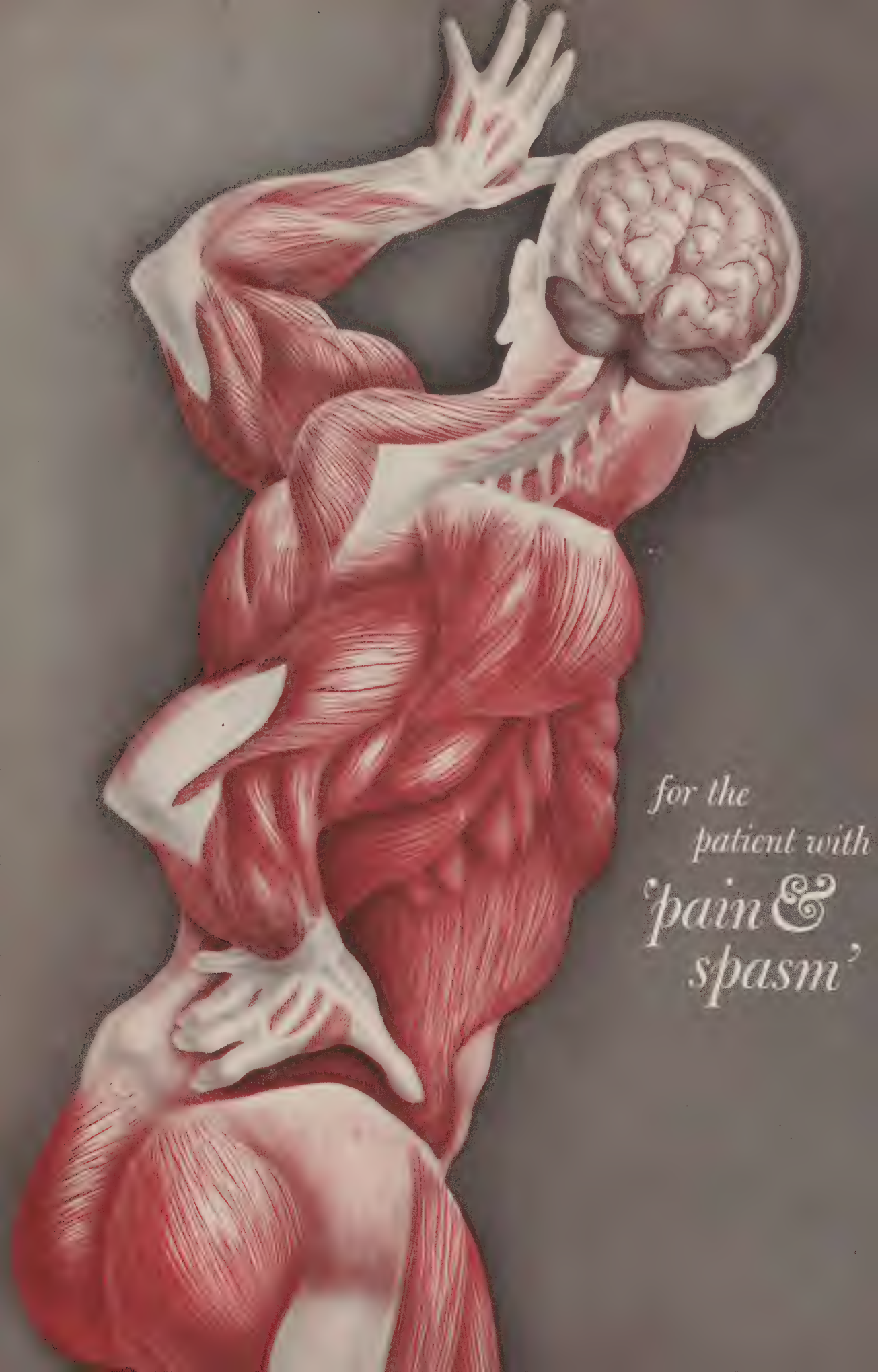
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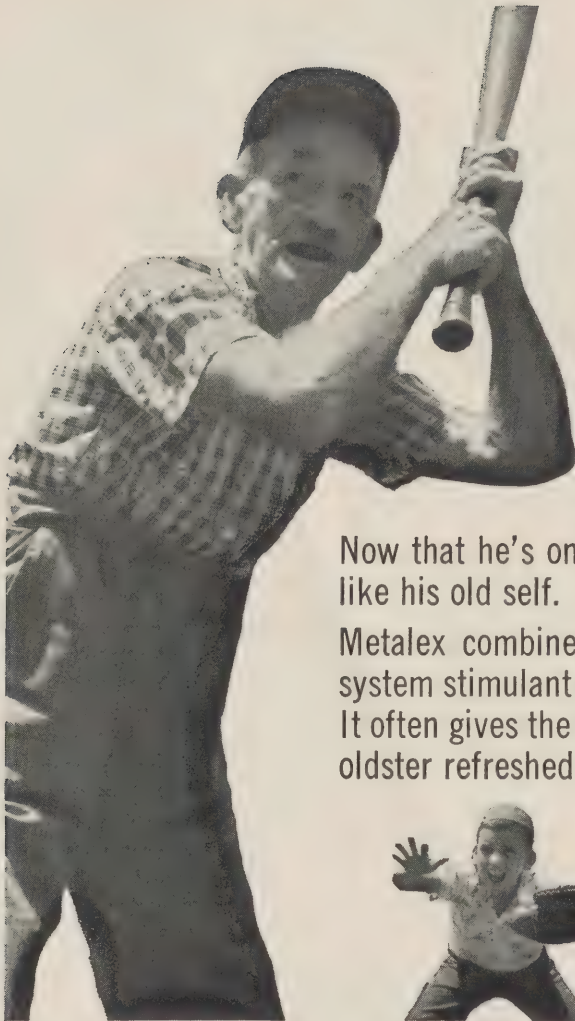
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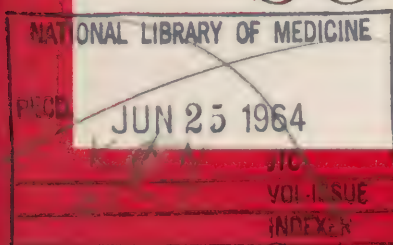
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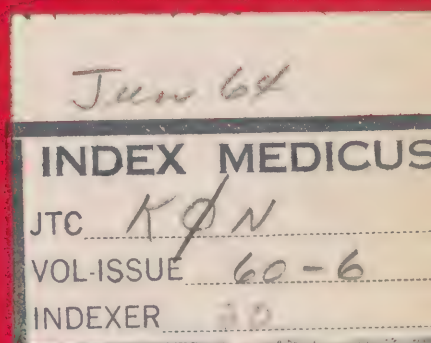
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References: 1. Szymanski, F. J.: *Indust. Med.* 30:498, Nov., 1961. 2. Wexler, Louis: *Clin. Med.* 70:404, Feb., 1963. 3. Hodges, F. T.: *GP* 14:86, Nov., 1956. 4. McLean, I. E. D.; Graham, K. T., and East, M. O.: *Practitioner* 189:82, July, 1962.

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Length—Short articles of about 2,500 words (about 8 typewritten pages, double spaced) are preferred. Longer articles ordinarily will defer to the shorter ones in schedule of publication.

Manuscripts—Manuscripts should be typewritten, double spaced, and the original and a carbon copy submitted.

Illustrations—Ordinarily publication of 4 small illustrations or the equivalent accompanying an article will be paid for by The Journal. Any number beyond this must be paid for by the author except under unusual conditions. Illustrations should be sent as glossy prints or graphs in black ink with lettering large enough to show after reduction.

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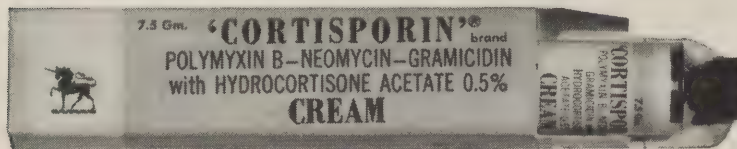
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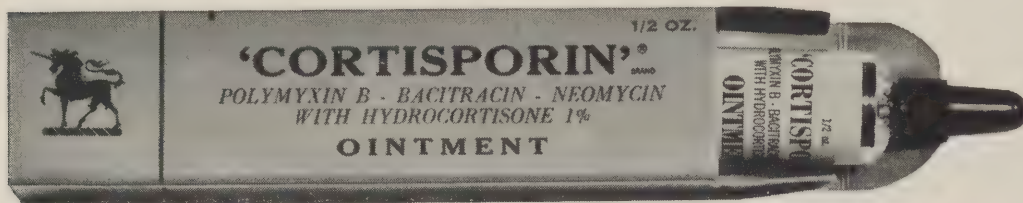
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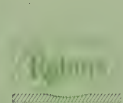
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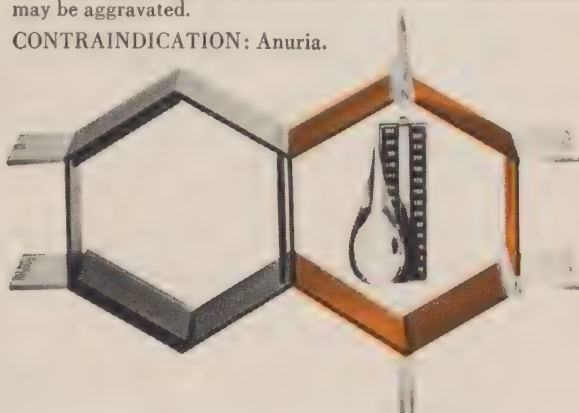
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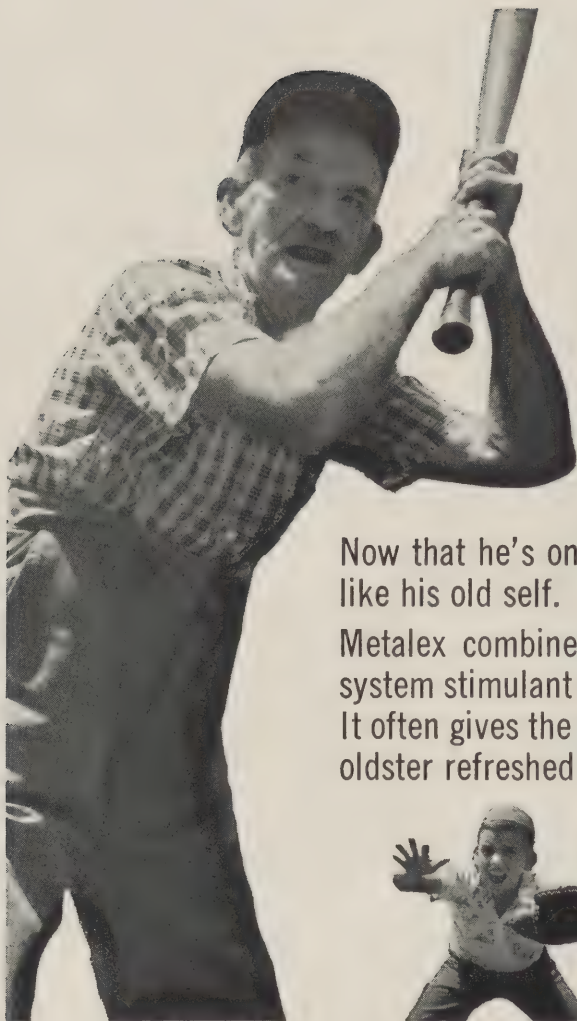
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VOLUME 60

June, 1964

NUMBER 6

SUPERIOR MESENTERIC ARTERY SYNDROME

GEORGE T. McCUTCHEN

Columbia, S. C.

Obstruction of the terminal duodenum by the superior mesenteric artery is an interesting phenomenon. It is also a controversial one, with an ebb and flow of interest shown in it since its original description by Rokitsky in 1861. Opinions run the gamut from doubts that such a syndrome exists to opinions that many may have become too enthusiastic in making such a diagnosis. Opinion as to treatment varies from that which holds that all cases respond to medical management to that which contends that most cases must be treated surgically if they are to be completely relieved. No doubt in a great many cases the diagnosis has long been delayed or surgical treatment postponed until these patients develop both physical and emotional problems, often of major degree.

It is difficult to understand why there was a wave of reports of this disease prior to the 1930's, then a dearth of reports until recently. Willette described the "Cast Syndrome" in 1878. Aldrecht in 1899 produced duodenal compression experimentally by attaching weights to the mesentery of the small intestine. Petit in 1900, Barker in 1906 and Bloodgood in 1907 advocated duodeno-jejunostomy as the best surgical approach. In 1917 Downes described the condition in children. Interest appeared to be high in the ten years between 1920 and 1930 when operations on over 100 patients were reported. During

another ten year period from 1944 to 1954 only seven such cases were described. Re-kindled interest since 1959 has resulted in many reports which have brought the overall total of cases to over 200. This rise and fall of reports may be accounted for, in part, by the paucity of information on the subject in text books.

A galaxy of names has been applied to this disease. Among them, duodenal ileus (Wilkie's syndrome), acute gastroduodenal obstruction, arteriomesenteric duodenal compression, gastromesenteric occlusion, arterio-mesocolic compression, cast syndrome, idiopathic or congenital megaduodenum, giant duodenum and superior mesenteric artery syndrome, which last appears to be the most popular one.

Theories of Causation and Incidence

Many theories of causation have been advanced. Among them are lumbar lordosis or kyphosis, heavy or short mesentery, abnormally high fixation of the terminal duodenum by the ligament of Treitz, acute angulation between the superior mesenteric artery and aorta, failure of rotation of the duodenum, visceroptosis, defective abdominal musculature, sudden weight loss and application of a body cast. One or several of these factors may be operative in a given case. Many of these causes are congenital, so we can understand why symptoms frequently develop in

childhood, but it is difficult to know why the highest incidence of reported cases has been in the age group between 25 and 35 and that only 14 cases have been reported in children. A patient 78 years old has been reported. We may presume that one of the acquired causes was the primary factor although some of these patients have suffered for years before the diagnosis was finally made.

Since the finding of duodenal obstruction has had such sporadic and skeptical attention, it is interesting to speculate on the connection it might have with such poorly understood complications of gastric resection as the "dumping syndrome" and some instances of the "blown stump." Twenty-five per cent of these cases are said to have an associated duodenal ulcer. Certainly there is a strong likelihood of a "blown stump," even with good closure, if resection is carried out for ulcer and duodenal obstruction is overlooked. The "dumping syndrome" may be more mechanical and less chemical than we now suppose. Our review of this disease leads us to believe that the relationship is not improbable.

Symptoms and Diagnosis

Vomiting of bile-stained material is the most consistent finding and should lead to suspicion of the diagnosis when other symptoms of abdominal disease are absent or trivial. Vomiting is frequently persistent, unprovoked and projectile. In one of our cases it was so severe that it resulted in massive hematemesis. Abdominal pain is usually of minor degree and vague in nature. Massive acute gastric and duodenal dilatation is present in advanced cases and may lead to death if not relieved. The final arbiter of the diagnosis is the radiologist. The disease is said to be "endemic" where the x-ray men are aware of it.

Signs may vary from mild dilatation of the terminal duodenum, with a sharp cut-off at the site of the artery, to massive dilatation of the duodenum throughout its extent and dilatation of the stomach with hypertrophied rugae from prolonged effort to force material past the obstruction. Churning of barium on

fluoroscopy is said to be a common finding but not pathognomonic. It is important that x-ray examination be carried out in the upright position since barium may pass the site of obstruction when the weight of the mesentery is removed. Use of this position led to the diagnosis in some of our cases. In others the diagnosis was obvious in any position. The Hayes maneuver depends on the above principles and may be helpful. It is described as the disappearance of duodenal retention when the patient is placed in the prone position or when manual pressure is exerted on the lower abdomen in a cephalad direction while the patient is in the prone position.

In the differential diagnosis, the following have been mentioned; congenital bands, malrotations, defective fusion of the mesentery, annular pancreas, duplication of the intestine, volvulus and tumors, lymph nodes or inflammation in the region of the terminal duodenum. But one of the chief problems in diagnosis is created by the fact that many of these patients are very disturbed and depressed. They present the characteristic picture of the anxiety state which is anathema to the surgeon. This psychogenic overlay may be attributed to the fact that they have endured ill health for years and have been labelled gastro-intestinal psychoneurotics. Many have undergone one or more abdominal operations with release of adhesions, cholecystectomy or appendectomy and have been unrelieved. "Mental instability" is a phrase that appears frequently in reference to some of our patients. However, some were perfectly stable. An imponderable which adds to difficulty in diagnosis is the fact that symptoms may appear in episodic fashion. There may be periods of remission when symptoms are few and then there is a sudden, often violent, reappearance. This periodicity may serve as a stumbling block in diagnosis if x-ray examinations are carried out during a period of relative remission. The psychic factor has disappeared dramatically after operation in our cases where it has been apparent. This would lend credence to the thought that

anxiety was the result of long postponement of definitive treatment.

Treatment

Medical treatment is related mainly to assuming positions which will take the pressure of the artery off of the duodenum. The knee-chest, left lateral or Trendelenburg positions will accomplish this purpose. Improved nutrition and correction of postural defects may obviate some of the causative factors. Bockus stated that none of his cases required surgery but some of the advanced cases in our group would create a real ordeal of management for the internist.

Surgical treatment has been highly successful. Duodenoduodenostomy anterior to the artery may be more dangerous than other procedures and is certainly more complicated. Gastro-enterostomy enjoyed some popularity but fails to fit the problem directly since duodenal contents must be regurgitated into the stomach before they can be passed into the jejunum. Our first patient obtained an excellent result from this procedure. Our second patient required re-operation after gastro-enterostomy. Division of the ligament of Treitz, which drops the duodenum out of the apex of the triangle created by the artery, spine and aorta, appears to be reasonable and has been tried in a limited number of cases since it was described by Strong in 1958. One of our patients had this procedure done, possibly in an inadequate manner, in 1953 and required further surgery for relief of the obstruction. Retrocolic duodenojejunostomy is easy to perform, attacks the pathology directly, is more certain to be successful and is safe when the anastomosis is protected with a Witzel type duodenostomy.

Case Reports

Case 1. R. B.—Age 46. A chronic abdominal invalid for a period of many years, studied at length in all hospitals in city and by many internists; nothing specific was found. One of the worst physical and emotional wrecks I have seen—markedly asthenic—almost cadaveric. X-ray examination suggested obstruction of terminal duodenum. Exploration was carried out with misgivings because of the strong impression of psychogenic origin of complaints. Dilatation of the terminal duodenum was

found with apparent arteriomesenteric occlusion. Gastro-enterostomy was performed. Because the patient was completely psychotic postoperatively she required shock therapy and heavy sedation but this factor improved gradually. Surgical recovery was uneventful. Her general convalescence was slow. She reports by letter that she is now completely well, has no symptoms related to the abdomen, and eats anything she wishes without difficulty. This was our first case. Apparently, gastro-enterostomy was effective.

Case 2. L. K.—Age 35. She had suffered with upper abdominal pain, nausea and vomiting for some time prior to suggestion of mesenteric duodenal occlusion on x-ray examination. Surgical exploration was carried out. The duodenum was obviously dilated. Gastro-enterostomy was performed, with some improvement for a while, then pain returned. On diagnosis of marginal ulcer a second exploration carried out. Resection done at insistence of internist. Also a duodenojejunostomy with duodenostomy was done. Improvement was satisfactory for a while, but recent report reveals that some complaints have returned, most of which are related to the abdomen. The patient was suspected of a strong psychogenic factor from the beginning. This case was our only disappointing one. Partial failure may be attributed to improper evaluation of the psychiatric factor or possibly to poor choice of operation the first time..

Case 3. D. F.—Age 19. An x-ray technician, had suffered with abdominal pain "ever since she was a baby" and had been seen by many physicians without relief "for years." X-ray revealed retention of barium in the stomach and typical signs of dilatation and obstruction of duodenum at its terminal end. A medical regimen was tried with no benefit. The patient was subjected to duodenojejunostomy with duodenostomy in October 1961, and has been asymptomatic since that time. A second x-ray examination reveals both openings functional.

Case 4. S. B.—Age 9. Had chronic, recurrent abdominal pain—vague and indefinite—over a period of several years accompanied by nausea and vomiting. Exploratory laparotomy with repair of umbilical hernia was done in 1959; ileal adhesions were released but nothing very definite found. After a short lapse of time symptoms recurred, and she missed school frequently. Evidence of terminal duodenal obstruction were found by x-ray examination. Psychogenic overlay was strongly considered because of longstanding history, asthenic habitus, concerned parents and other factors. However, exploration was carried out January 20, 1962; duodenojejunostomy with duodenostomy was done. Follow-up one year later reveals she is completely relieved of symptoms. This patient was the youngest of our series.

Case 5. C. H.—Age 38. A patient of Dr. E. C. Kinder, had nausea and vomiting for many months

prior to our observation in June 1961. Several x-ray examinations of the G. I. tract had been reported as negative but review revealed that the last one suggested a channel ulcer and notable obstruction of flow through the terminal duodenum in the upright films. Medical regimen was instituted with no result. Symptoms became worse. Abdominal operation was carried out. The duodenal wall was thickened and its lumen about twice normal size. Duodenojejunostomy was done. The patient gained ten pounds within one month after surgery. Recent follow-up reveals that she has no complaints relative to the abdomen. A noteworthy feature is the fact that of many x-ray films the only ones which helped with diagnosis were those taken in the upright position. This feature was present in others of our cases but does not seem to be emphasized in the literature.

Case 6. M. P.—Age 30. A patient of Dr. Charles Lemmon, had nausea and vomiting for some time prior to 1953 when a diagnosis of "obstruction at the ligament of Treitz" was made by x-ray examination and findings at laparotomy. Release of adhesions at the ligament of Treitz was performed. She was relieved for a period of three months. When symptoms returned, secondary operation was carried out and gastro-enterostomy performed. Nausea and vomiting ceased to be a factor in her symptomatology but she began to have cramping abdominal pain and diarrhea associated with weight loss. She declined to 87 pounds and was put into the hands of a psychiatrist who gave her 15 electro-shock treatments in 1956. There was some improvement but moderate diarrhea persisted. By 1960 she was down to 95 pounds and suffered with abdominal cramps with 5 to 6 diarrheal stools daily.

In 1962 x-ray revealed rapid emptying of the stomach through the gastro-enterostomy stoma but no other abnormalities. Nothing definitive was done until March of 1963 when the above x-ray findings were reaffirmed. More in desperation than for any other reason, it was decided that the gastro-enterostomy should be "taken down." After this procedure was done, the old dragon, vomiting, reappeared and persisted. X-ray revealed almost complete obstruction at the third portion of the duodenum. Ten days after this operation we saw her in consultation and suggested duodenojejunostomy. After performance of this procedure, she made an uneventful recovery. Since discharge from the hospital she has been asymptomatic. Diarrhea has gone and she feels that a "solution to her problem has been made." Within six weeks after operation she had gained 14 pounds. It is noteworthy that a "release of adhesions at the ligament of Treitz" was done in 1953, five years before it was described in the literature by Strong, also that gastro-enterostomy was unsuccessful for reasons difficult to explain and that the true diagnosis evolved only after the gastro-enterostomy was "taken down."

Case 7. M. S.—Age 52. Had been susceptible to nausea and vomiting since early childhood. First seen in June of 1958. Vomiting blood profusely (750 ml twice within ten minutes while we were at bedside). She was exsanguinated at time of emergency laparotomy. Duodenotomy and gastrotomy done. There was a pumping vessel from a tuft or pedicle on posterior aspect of the middle third of stomach. Admitted again in February 1960, again with nausea and vomiting. Questionable x-ray diagnosis of duo-

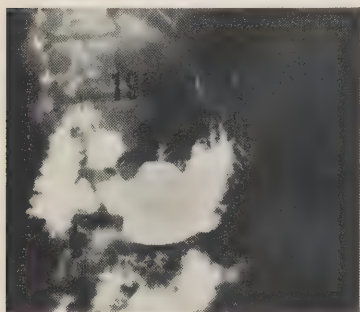


Figure I

Shows marked dilatation of the duodenum in Case 7 which was apparent in 1960—two years prior to duodenojejunostomy. "Blown stump" would be likely if Billroth II resection were carried out in a patient with these or lesser findings who had an associated duodenal ulcer. A poor result could also be expected following Billroth I type resection.

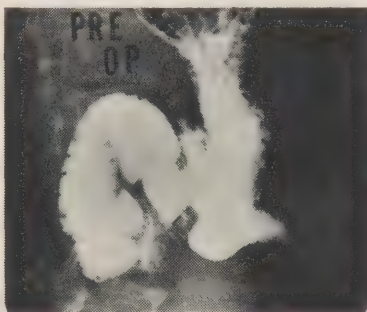


Figure II

Marked dilatation of duodenum including bulb in Case 7. The stomach shows hypertrophied rugae resulting from effort to pass material past obstruction.



Figure III

Taken six weeks postoperatively in Case 7. All evidence of dilatation has disappeared. Barium is passing through the anastomosis and normal opening. This is the usual finding in post-operative films.

SUPERIOR MESENTERIC ARTERY SYNDROME

denal ulcer was made. Medical treatment was given. Re-admitted in November 1961. Again nausea and hematemesis. Questionable gastric ulcer on x-ray examination but previously suspected duodenal ulcer not found. Again put on medical treatment. I did not see her on either of these two admissions. Admitted again in March 1962. Hematemesis. X-ray examination revealed marked increase in rugal pattern of stomach, distention of duodenal bulb, enlarged duodenum and typical "cut off" of its terminal portion. Operation consisted of duodeno-jejunostomy with duodenostomy. Improvement has been dramatic. Review of films showed consistent increase in rugal pattern of the stomach even though the classical signs

were not present in the duodenum. The pylorus and duodenal bulb were rather consistently dilated. This one is classical of the diagnostic quandary produced if this condition is not considered. We could not use the excuse of "psychogenic overlay." She was a stable and well oriented individual. Vomiting of massive quantities of blood was a unique symptom. I have not seen this syndrome mentioned as a cause of gastro-intestinal bleeding.

Summary

This report reviews an experience with seven cases of the superior mesenteric artery syndrome. One patient was a child of nine

TABULAR RESUME OF CASES

SEX	AGE	SYMPTOMS	ROENTGENOGRAMS	PRIOR SURGERY	SURGERY
F	46	Long history abdominal pain — Vomiting— Massive weight loss— Physical and emotional wreck	Obstruction terminal duodenum—Dilated duodenum	None	Gastro-enterostomy 1959
F	35	Abdominal pain— Vomiting—Moderate weight loss—anxiety state	Obstruction terminal duodenum—Dilated duodenum	None	Gastro-enterostomy 1960— Gastric resection and duodeno-jejunostomy Duodenostomy 1960
F	19	Abdominal pain— Vomiting "for years"	Retention of barium in stomach and duodenum— Dilatation of duodenum	None	Duodenojejunostomy Duodenostomy 1961
F	9	Recurrent episodes abdominal pain— Vomiting—Weight loss	Obstruction flow of barium Terminal Duodenum 1961	Repair umbilical hernia Release ileal adhesions 1959	Duodenojejunostomy Duodenostomy 1961
F	38	Abdominal pain— Vomiting—Moderate weight loss	Several negative— One reported positive for duodenal obstruction	None	Duodenojejunostomy 1961
F	36	Vomiting—Severe loss of weight—Diarrhea after gastro-enterostomy Anxiety state	Obstruction at Ligament of Treitz 1953— Rapid emptying of stomach 1953 to 1963— Almost complete obstruction at ligament of Treitz following take-down of gastro-enterostomy 1963	Release of adhesions at ligament of Treitz 1953—Gastro-enterostomy 1953— Take-down gastro-enterostomy in 1963	Duodenojejunostomy (2 weeks following take-down of gastro-enterostomy)
F	52	Nausea and vomiting since early childhood— Vague upper abdominal pain— Massive hematemesis	Duodenal ulcer 1960— Gastric ulcer 1961— Hypertrophied rugae in stomach—Duodenal dilatation—Obstruction of terminal duodenum	Duodenotomy— Gastrotomy—Suture bleeding point posterior aspect middle third of stomach 1958	Duodenojejunostomy— Gastrotomy and duodenostomy 1963

years. The oldest was fifty-two. All were females. Vomiting was the most consistent symptom. All diagnoses were confirmed by x-ray. Several of these patients had been labelled as psychoneurotics and symptoms had been present for many years but the diagnosis was overlooked. Two patients were severely malnourished. Three had undergone other abdominal operations without relief. One had received shock therapy prior to surgery because of extreme emotional disturbance. One required shock therapy in the immediate postoperative period for an uncontrollable psychotic reaction.

One patient suffered massive hematemesis, a finding which we have not seen described

elsewhere. Another unique case was one treated by release of adhesions at the ligament of Treitz in 1953 without relief. She was then subjected to gastro-enterostomy in the same year. Diarrhea and progressive malnutrition led to a decision to "take down" the gastro-enterostomy. Signs of duodenal compression returned promptly. Duodeno-jejunosotomy was done and an excellent result obtained.

One patient has obtained an excellent result from gastro-enterostomy. Another did not and required a second operation. Six patients were treated by retrocolic duodeno-jejunosotomy with gratifying and sometimes spectacular results.

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Does uterine contractility cause fetal bradycardia?
—A. Vasicke and H. T. Hutchinson. *Obstet Gynec* 22:409 (Oct) 1963.

Studies of 40 pregnant women during various stages of labor revealed that normal uterine contractility does not cause fetal bradycardia. Either no change in fetal heart rate or a slight acceleration during a "physiological" uterine contraction was observed. When fetal bradycardia occurred, it was in connection with abnormalities such as prolonged intensity, poor relaxation, hypertonus, and tetanic contraction. Also, after rupture of the membranes, when the vertex becomes engaged, fetal bradycardia occurs during each contraction due to compression of the fetal skull, but not due to the abnormality of uterine contractility. The quality, duration, and depth of the relaxation period between contractions seem to chiefly determine whether or not the uterine contractility will become a source of fetal distress. Normal uterine contractility should consist of contractions not above 60 mm Hg, lasting no longer than one minute, and intra-amniotic pressures during the relaxation period should not exceed 10-12 mm Hg.

Epistaxis, by R. W. Hanckel and Richard M. Carter. (Charleston) *Southern Med J* 57:282-286, March 1964.

This paper deals with three unusual cases of nosebleed indicating some difficulties in diagnosis and management.

This first case was that of a 48-year-old nurse who had a tumor involving the sphenoid sinus which had eroded in the internal carotid. This case terminated fatally.

The second case was that of a 39-year-old female school teacher who had multiple nosebleeds requiring transfusions prior to our consultation. Arterial ligations and septal surgery were done prior to making a definitive diagnosis of PTA deficiency. The diagnosis was confused by transfusion.

The third case was that of a 62-year-old Negress who had macrocytoglobulinemia. Nasal bleeding was attributed to sloughing of the nasal mucosa. Soft cotton plugs were used to stop the nasal breathing and thus the sloughing and bleeding were controlled. A multiple myeloma was suspected.

THE PROTRUDING LOWER JAW: Surgical Correction and Management

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The relationship of the lower to the upper jaw in the antero-posterior plane differs considerably among different individuals. As one might expect, a forward jutting of the lower jaw is not an uncommon finding and a good occlusal and aesthetic result can be obtained with orthodontia in the less severe cases. In the more severe cases, however, surgery is the only satisfactory means of treatment.

The necessity for operating to correct mandibular prognathism may be outlined as follows:

1. To improve the function of mastication.
2. To preserve the dento-alveolar structures.
3. To cure or prevent dysfunction of the temporomandibular joint.
4. To make possible the prosthetic care of the edentulous cases.
5. To improve speech.
6. To improve facial appearance.

The difficulties in mastication arising from minor degrees of prognathism include the inability to incise, as in biting such foods as fruit and sandwiches. In the more extensive cases there may be total inability to chew because of the faulty occlusal relationships. This leads to early loss of the functionless teeth.

Because of the abnormal relationships of the teeth with each other and with their supporting structures in this condition, unusual strains are placed on the supporting bone and soft tissues of the alveolar ridges. Early loss of teeth is therefore also seen as the end result of these unnatural forces.

Temporo-mandibular joint dysfunction, although not a necessary accompaniment of this

abnormality, can be initiated by premature dental contacts producing reflex mandibular displacement during closure. Orthodontics and occlusal equilibration might improve less pronounced cases but surgery is required for the more pronounced ones.

Following the early and inevitable loss of teeth, the prosthodontist is left with the impossible task of fitting dentures to these abnormally related arches. As a result of the anatomical impossibility of securing the correct apposition between the upper and lower dentures, they are constantly being dislodged from their seating. No solution to this dilemma is at hand at present.

Abnormal speech in mandibular prognathism usually consists of distortion of sibilant sounds (s, sh) and of labio-dental sounds (f, v). There may even be interference with the normal formation of dental plosives such as ch and j.

Appearance alone is often sufficient reason for surgical correction, the abnormally prominent lower jaw being a source of severe psychic disturbance in many of these patients.

Operative Procedures

Through the years many operative procedures have been proposed for the correction of mandibular prognathism. By their very multiplicity one is led to doubt the reliability of any of them. However, in recent years an important contribution has been made in this field which affords considerable confidence to the surgeon undertaking this problem.¹

In reviewing the many techniques of the past, it appears that they can be classified into three approaches; (1) osteotomy of the mandibular body, (2) osteotomy of the angle of the mandible, and (3) osteotomy of the ramus of the mandible.

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In osteotomy of the mandibular body as developed by Dingman,² a segment of bone must be resected together with the included teeth. This approach is thus accompanied by several disadvantages including the loss of functioning teeth, occasional delayed union of the osteotomy site secondary to an opening into the mouth, paresthesias related to inferior alveolar nerve damage, and the necessity for multiple operative procedures.

Osteotomies at the angle of the mandible fail to correct the anterior open-bite in all cases and require an extended period of immobilization.

Osteotomies through the mandibular ramus include several techniques including the blind, the intra-oral, and the open approaches. The blind approach, in which the ramus is divided by a saw or osteotome through small incisions is too frequently associated with open-bite, damage to the inferior alveolar nerve, uncontrollable hemorrhage, and non-union of the segments, to be considered a reliable procedure. The intra-oral approach, as advocated by Obwegeser,³ consists of division of the ramus in the sagittal plane into its inner and outer cortices, the inner extending to just below the sigmoid notch, the outer to the angle of the mandible. Although this theoretically allows a generous coaptation of raw bone surfaces, the delicate vessels within the cortical plates of the ramus can be destroyed, fixation of the bone segments with wires is difficult, and such an approach through the mouth adds another opportunity for complications.

The open, or extra-oral approach which is finding such a wide acceptance today is based on sound surgical principles.

Prior to surgery dental study models are made, the desired occlusion determined, and the teeth prepared for their new inter-relationships by occlusal equilibration. Cephalometric x-ray studies and tracings are also carried out for assistance in obtaining the proper jaw relationships. Immediately prior to surgery malleable arch bars or inter-dental wires are secured in position.

A sub-mandibular incision through the soft tissues is carried out with care to preserve the ramus marginalis mandibularis of the facial nerve using a nerve stimulator. The masseter muscle is detached and elevated from the lateral ramus. The latter is divided in a vertical line from the sigmoid notch to the angle of the mandible with a dental burr and chisel, with care to preserve the inferior alveolar nerve on the anterior segment. The outer aspect of the lateral cortex of the anterior segment is freshened with a dental burr. The teeth are then placed in the selected position of occlusion, fixed by elastic bands, and the bone segments firmly united with internal wiring. This technique has the advantages of apposition of broad planes of bone fixed in the desired position by wires to assure early bony union. With detachment and later replacement of the masseter muscle, forces tending to distort the relationships of the bone segments are greatly reduced. The open approach eliminates oral contamination



Figure 1.
Preoperative and postoperative appearances of patient 1.



Figure 2.
Preoperative and postoperative appearances of patient 2.

and permits better visualization of the structures, such as the alveolar nerves and large vessels.

Two cases are presented as examples of this method to demonstrate what can be expected functionally and cosmetically.

1. L.H., a 31 year old white female, complained not only of inability to bite such foods as fruits and sandwiches but also of her appearance. She had little or no difficulty with chewing, speech, or temporo-mandibular joint dysfunction. Following examination of her dental study models, the desired relationship of her jaws was determined and occlusal equilibration carried out. On Aug. 20, 1962 correction of the mandibular prognathism was accomplished utilizing a vertical osteotomy of the ramus. She was discharged from the hospital on August 26. On September 29 the elastic band traction immobilizing the mandible was removed permitting an almost complete return of mandibular range of motion before the inter-dental wires were taken off on October 18.

Her original complaint of being unable to incise was eliminated and her general facial contour, as well as her morale, was greatly improved.

2. Mr. C.B., an 18 year old white male college student, complained of inability to incise properly in addition to the abnormal forward jutting of his mandible. This young man was born with a unilateral complete cleft lip and cleft palate. He appeared with irregularities of the lip and nose following earlier surgical procedures. These were corrected first. After the desired relationships of the teeth were determined from examination of the dental study models, occlusal equilibration was carried out. On July 18,

1963 the mandibular prognathism was corrected with a vertical osteotomy of the ramus. He was discharged from the hospital on July 23 with his teeth firmly fixed in normal occlusion with elastic bands. These were removed on September 6. After regaining the normal mandibular excursion the inter-dental wires were taken off on September 24.

Follow-up examinations have revealed a very satisfactory result in his ability to incise together with a marked improvement in his appearance, which had a pronounced effect on his outlook.

Summary

A brief review of the several approaches to surgical correction of mandibular prognathism has been made and their various advantages and disadvantages pointed out. In the open vertical osteotomy of the ramus there are distinct advantages in that a satisfactory apposition of bone can be obtained with adequate fixation of the segments to ensure solid bony union, the final occlusal results are good with little possibility of open-bite deformity, and the danger of injury to the inferior alveolar nerve or other structures is minimized. The disadvantages of this approach are the proximity of the ramus mandibularis of the facial nerve and the length of the operative procedure, which approaches four hours. However, the reliability of the results more than tips the balance in favor of the advantages of vertical osteotomy for correction of mandibular prognathism.

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HUMAN LISTERIC INFECTION IN SOUTH CAROLINA

The Second, Third and Fourth Cases Reported

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Introduction

Although *Listeria monocytogenes* was first isolated from animals in 1926¹ and from man in 1929,² the significance of this organism as a pathogen has remained obscure until recent years. In his excellent summary of *L. monocytogenes* Gray³ has referred to some of the factors which have contributed to a lack of understanding of this organism. These include lack of awareness of the organism, which results in its being discarded as a contaminant, the difficulty of isolating it from certain animal tissue, the failure to develop a reliable serological test for the detection of the organism, the notion that listeric infections are rare and highly acute, and the failure to establish its natural reservoir.

Perhaps one of the most significant contributions to this obscurity has been the failure of many bacteriology laboratories to isolate and identify the organism. The isolation of *L. monocytogenes* from tissue usually requires maceration of the specimen with distilled water and subsequent storage at 4° C. Periodic cultures of the stored suspension should be continued for as long as three months. As recently as 1959 the Massachusetts Department of Health reported a survey in which only 55 per cent of 71 laboratories correctly identified *L. monocytogenes*.⁴

With a host range that includes in addition to man some 35 mammals and 15 fowls, and its established presence in stream water, sewage and silage, evidence is rapidly accumulating in regard to the serious menace of

L. monocytogenes to human and animal health.⁵ The notion that listeric infection is a rare disease must be considered incorrect in view of the 1500 cases now recorded, with more new cases being reported each week. At the same time there is little evidence to indicate that the incidence of listeric infection is any greater today than in the past. An increased awareness of the infection by clinical and laboratory personnel would seem to account for the fact that over four-fifths of the 1500 reported cases of listeric infection have been recorded during the past five years.

In man *L. monocytogenes* has been associated with a wide variety of disorders which include endocarditis, conjunctivitis, septicemia, meningitis and habitual abortion. Following the report of Nyfeldt⁶ of the isolation of *L. monocytogenes* from the blood and spinal fluids of patients with infectious mononucleosis, considerable effort has been directed toward establishing this organism as the etiologic agent in infectious mononucleosis. At the present time however, an unknown virus is believed to be the etiologic agent in this disease.

Potel⁵ and Seeliger⁶ have reported numerous cases of perinatal listeric septicemia resulting in a human form of listeriosis known as granulomatous infantiseptica. This appears to be the most common listeric infection occurring in Europe. This association of *L. monocytogenes* with perinatal infection led Seeliger⁷ to suggest the possibility of this organism as an etiologic agent in habitual abortion in women. Rost *et al*⁸ and Rappaport

et al^o have investigated this possibility. Rabinovitz^o has reported a discouraging aspect of attempts to establish this link. Following the report which covered 24 cases during the first year of the study, large numbers of habitual aborters in Israel were treated promiscuously with massive doses of antibiotics without adequate bacteriological studies. As a result of this treatment only four cases were seen during the second year of the study and none during the third.

Human infections due to *L. monocytogenes* have been reported with increasing frequency in the United States during the past decade. New York with 60 cases, Louisiana with 56 cases and California with 48 have reported the greatest numbers of cases. In the United States meningitis appears to be the most prevalent form of listeric infection.

In early 1963 the laboratories of the Department of Microbiology, Medical College of South Carolina, isolated *L. monocytogenes* from the second, third and fourth cases of human listeric infection which have been recorded in South Carolina.

Case Reports

Patient A: this patient was a colored female, born three months premature. At birth the placenta was scarred and infarcted, but intact. Physical examination of the infant shortly after birth revealed a colored female of severe immaturity weighing 1 pound, 13 ozs., with labored respiration and deep retraction. No gross physical abnormalities were noted. The infant was placed in the premature nursery and given intensive supportive care.

The infant tolerated tube feeding fairly well, but failed to gain weight and expired on the 14th day of life. The weight at death was 1 pound, 4 ounces.

The extreme immaturity of the infant precluded any laboratory studies during life, but specimens of blood and subdural fluid collected shortly after death were positive on bacterial cultures for *L. monocytogenes*, type 1.

The in vitro chemotherapeutic sensitivity tests against this culture of *L. monocytogenes* have shown the organism to be sensitive to less than 5 mcg chloramphenicol; 2 units penicillin; 2 mcg streptomycin; 5 mcg oxytetracycline; 2 mcg erythromycin and 5 mcg tetracycline.

Patient B: this patient was an infant who was first seen in the hospital emergency room, with a history of fever and vomiting for 3 days prior to being brought in. The physical examination in the

emergency room noted a 14 day old, well developed, colored female, with a rectal temperature of 101° F. and a pulse of 180. Although the lungs were essentially clear, the infant seemed to be in moderate respiratory distress, with irregular, grunting respiration. Bulging anterior fontanelles and right sided facial spasm on arousal were noted. The reflexes on the right side seemed less active than on the left.

The infant was admitted to the Medical College Hospital where a lumbar puncture was performed. The tap was traumatic and the laboratory reported a cell count of 260, with 61% polys and 39% lymphs. CBC at admission showed hemoglobin 16 Gm and 25,100 leucocytes.

Bacterial cultures of the spinal fluid collected at admission were positive for *L. monocytogenes*, type 4B. The in vitro chemotherapeutic sensitivity tests against this culture of *L. monocytogenes* have shown the organism to be sensitive to less than 5 mcg chloramphenicol; 2 units penicillin; 2 mcg streptomycin; 5 mcg oxytetracycline; 2 mcg erythromycin and 5 mcg tetracycline.

The patient was given 600,000 units of penicillin intramuscularly on the day of admission and was placed on tetracycline, 30 mg t. i. d. by mouth when the spinal fluid culture was reported positive. The patient was continued on tetracycline for a total of 10 days.

The patient became afebrile on the third day and was discharged after 5 days of hospital care. At discharge, no neurological damage could be detected and the patient appeared to be normal.

Patient C: this patient was a colored female admitted to the Medical College Hospital with a history of cough and fever for 2 days prior to admission. The physical examination at admission noted an irritable, well developed, 12 day old, colored female, with a rectal temperature of 104°. Some muscle rigidity and questionable bulging fontanelles were noted, but the remainder of the physical examination was within normal limits.

Spinal fluid collected at the time of admission was reported as having a cell count of 1,800 with 85% lymphs and 15% polys. Bacterial cultures of this spinal fluid were positive for *L. monocytogenes*, type 1.

The in vitro chemotherapeutic sensitivity tests of this culture have shown the organism to be sensitive to less than 5 mcg chloramphenicol; 2 units penicillin; 2 mcg streptomycin; 5 mcg oxytetracycline; 2 mcg erythromycin and 5 mcg tetracycline.

The patient was put on penicillin intramuscularly and chloramphenicol and sulfadiazine by mouth at the time of admission and changed to oxytetracycline when the culture was reported positive. The patient remained on oxytetracycline, 15 mg t.i.d., for a total of 10 days.

The patient was discharged on the 11th day with no apparent neurological damage.

Discussion

Although this report raises the total number of cases of human listeric infection in South Carolina to only four, there probably have been other cases which have gone undetected.

The growth of *L. monocytogenes* from the specimens collected on these three patients presented no problems. All of the cultures grew quite readily on blood agar, with growth appearing on the initial culture attempts after 18 to 24 hours of incubation. It should be noted that the ease with which the growth was obtained from these specimens is not always the case. On many occasions it is most difficult to isolate this organism, even though the bacterial cells may be seen in stains of the specimen material.

Two of the patients recovered with no apparent neurological damage after treatment with a tetracycline. In Europe and in those parts of the United States where large numbers of cases of human listeric infection have occurred, the tetracyclines have long been recognized as the drugs of choice in such in-

fections. A high mortality rate in untreated listeric infections has been reported from Europe and permanent neurological damage may occur in cases with delayed treatment.

Summary

The second, third and fourth cases of human listeric infection which have been recorded in South Carolina are reported here.

Two of the cases exhibited the infection in the form of meningitis, with both patients recovering after treatment with a tetracycline. The third case appeared to be the result of a perinatal septicemia, with death occurring on the 14th day of life.

Clinicians and laboratory personnel should be alert to the possibility of listeric infection, especially in premature infants and those 10 to 14 days old. Material from suspected cases should be refrigerated for several days or weeks with periodic culture attempts before reporting as negative.

The authors are indebted to Dr. M. L. Gray, Veterinary Research Laboratory, Montana State College, Bozeman, Montana for carrying out the serological typing of these cultures.

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THE ABUSED CHILD

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The Battered Child Syndrome is a term used to characterize a clinical condition in young children who have received serious physical abuse, generally from a parent or parent substitute. The condition has also been described as unrecognized trauma and is a significant cause of childhood disability and death.

Child neglect and abuse are not new phenomena in our society, or in any society. However, there is an increasing awareness on the part of physicians, which is evidenced by the reports that began to pour into the U. S. Children's Bureau about 1960, and recently have received increased attention by physicians, social workers, and law enforcement officials.

As a general rule, abused children are under three years of age; in fact, most are infants. Not infrequently the beaten infant is a product of an unwanted pregnancy, a pregnancy which began before marriage, too soon after marriage, or at some other time felt to be extremely inconvenient.

The incidence of death among these abused children is high. One study made by the American Humane Association of 662 cases of child abuse reported during 1962 showed that slightly more than one in every four of these children died as a result of the injuries inflicted upon them.

By far the greater number of injuries resulted from beatings with various kinds of implements and instruments. The hairbrush was commonly the implement used, but the incidents involved use of bare fists, straps, electric cords, TV aerials, ropes, rubber hose, fan belts, sticks, wooden spoons, pool cues, bottles, broom handles, baseball bats, and chair legs.

The injured youngsters also included some who had been burned, strangled, suffocated, stabbed, bitten, shot, subjected to electric shock, or thrown violently.

"The true dimensions of the problem cannot be accurately defined," said Vincent De Francis of the American Humane Association, which made the study of the 662 cases. "Educated estimates place the number of abused children in the thousands—some estimates running as high as 10,000 cases per year. The parents were responsible in about three-fourths of the reported cases. They were also responsible for slightly more than 75% of the total fatalities. The average age for mothers was found to be 26 years; the average age for fathers was 30 years. Sometimes one spouse indicated that the other was the attacking person, but more often there was complete denial of any knowledge of injury to the child and the maintenance of an attitude of complete innocence on the part of both parents.

In some of the published reports the parents, or at least the parent who inflicted the abuse, have been found to be of low intelligence. Often they are described as psychopathic or sociopathic characters. Alcoholism, sexual promiscuity, unstable marriages, and minor criminal activities are reportedly common amongst them. They are immature, impulsive, self-centered, hypersensitive, and quick to react with poorly controlled aggression. Data in some cases indicate that such attacking parents had themselves been subject to some degree of attack from their parents in their own childhood.

It has long been recognized by psychologists and social anthropologists that patterns of child rearing, both good and bad, are

passed from one generation to the next in relatively unchanged form.

The physical abuse of children frequently follows a pattern of severe and repeated injury. Physical examination may disclose signs of general neglect, malnutrition and poor skin hygiene, a withdrawn and repressed personality, bruises, abrasions, burns, soft tissue swellings, hematomas, old healed lesions, evidences of dislocations or fractures, coma, convulsions, or death.

According to a recent paper¹ radiologic examination plays two main roles in the problem of child abuse. Initially, it is a tool for case finding, and subsequently, it is useful as a guide in management.

The diagnostic signs result from a combination of circumstances: age of the patient, nature of the injury, the time that has elapsed before the examination is carried out, and whether the traumatic episode was repeated or occurred only once.

The extremities are most commonly injured in this syndrome due to the ease and frequency with which a child is seized by his arms or legs. Even when bony injuries are present elsewhere, as in the skull, spine or ribs, signs of injuries to the extremities are usually present. The extremities are the "handles" for rough handling, whether the arm is pulled to bring a reluctant child to his feet, to speed his ascent upstairs, or when the legs are held while swinging the tiny body in a punitive way or in an attempt to enforce corrective measures. The forces applied by an adult hand in grasping and seizing usually involve traction and torsion; these are the forces most likely to produce epiphyseal separations and periosteal shearing. Shaft fractures result from direct blows or from bending and compression forces.

The time after injury that the x-ray examination is made is important in evaluating known or suspected cases of child-abuse. Unless gross fractures, dislocations or epiphyseal separations were produced, no signs of bone injury are found during the first week after a specific injury. Reparative changes may first

become manifest about 12 to 14 days after the injury, and can increase over the subsequent weeks depending on the extent of initial injury and the degree of repetition. Reparative changes are more active in the growing bones of children than in adults, and are reflected radiologically in the excessive new bone reaction. Histologically, the reaction has been confused with neoplastic change by those unfamiliar with the vigorous reactions of young growing tissue.

Repetition of injury is probably the most important factor in producing diagnostic radiologic signs of the syndrome. The findings may depend on diminished immobilization of an injured bone leading to recurring macro- and micro-trauma in the area of injury and healing, with accompanying excessive local reaction and hemorrhage, and ultimately, exaggerated repair. Secondly, repetitive injury may produce bone lesions in one area at one time, and in another area at another, producing lesions in several areas and in different stages of healing.

Thus, the classical radiologic features of the Battered Child Syndrome are usually found in the appendicular skeleton in very young children. There may be irregularities of mineralization in the metaphyses of some of the major tubular bones with slight malalignment of the adjacent epiphyseal ossification center. An overt fracture may be present in another bone. Elsewhere, there may be abundant and active but well-calcified subperiosteal reaction with widening from the shaft toward one end of the bone. One or more bones may demonstrate distinctly thickened cortices, residuals of previously healed periosteal reactions. In addition, the radiographic features of a subdural hematoma with or without obvious skull fracture may be present.

To summarize, the radiologic manifestations of trauma are specific, and the metaphyseal lesions in particular occur in no other disease of which we are aware. The findings permit a radiologic diagnosis even when the clinical history seems to refute the possibility

of trauma. Under such circumstances, the history must be reviewed, and the child's environment carefully investigated.

Up to the present time, therapeutic experience with the parents of battered children is minimal. Counseling carried on in social agencies has been far from successful or rewarding. There is no safe remedy in the situation except the separation of battered children from their parents. This is a growing problem with no easy solution.

Many laws that protect children from injuries and hazards already exist in a number of states, but other protections are greatly needed.

The U. S. Children's Bureau has drafted suggested wording for a state law to protect

the physically abused child. The physician who sees an abused child is in an optimum position to form reasonable preliminary judgments as to how the child's injuries occurred, and the suggested law calls for mandatory reporting by physicians and institutions to police authorities when conditions are found in which such abuse is a likelihood. This model law provides for immunity from liability, civil or criminal, for the person or institution reporting, and for nonrecognition in instances of such abuse of the usual physician-patient or husband-wife privilege as grounds for excluding evidence, and makes willful violation of the law's provisions a misdemeanor.

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Sudden unexpected death in infancy and milk sensitivity—J. I. Coe and R. D. A. Peterson. *J Lab Clin Med* 62:477 (Sept) 1963.

The sudden, unexplained death of 33 infants (aged from 1 to 11 months) was investigated by determining titers of serum antibodies to cow's milk protein which were then compared with those obtained from 67 control infants. Four of the 33 infants had cardiac defects which of themselves could be lethal. In the remaining 29 infants, however, the lesions (minimal bronchopneumonia, or pulmonary congestion and edema) were not sufficient to have caused the infants' death. The study failed to establish any relationship between sudden death and the titer of milk antibodies in the serum of the infants. No differences existed between the antibody titers of the infants who died and those of the controls. The authors now attempt to demonstrate milk antibodies fixed in the bronchial tissues by fluorescent antibody techniques on frozen lung tissue from the infants of this series.

Some observations on the clinical pathology of ischemic heart disease—J. B. Enticknap. *Guy Hosp*

Rep 112:254 (No. 3) 1963.

The help the pathologist can give the clinician in the diagnosis of heart disease is limited by the wide range or normal variations in the blood fats and by the controversy over their prognostic significance. In a consecutive series of 2,000 necropsies, myocardial necrosis due to atheroma was found in 37%; myocardial necrosis due to thrombosis in 15%; coronary occlusion due to atheroma without necrosis in 20%; coronary occlusion due to thrombosis without necrosis in 9%; and myocardial fibrosis only in 8%. The author emphasizes that some of the patients who die from stoppage of the heart's action have no anatomic lesion preventing the heart from beating if restarted. In these subjects the total esterified fatty acid level of the serum is particularly high. The blood lipids are much below their usual levels at the time of an attack of myocardial necrosis, fall thereafter for a few days, and rise slowly during the next few weeks. Cadaver sera are suitable for studying correlations between anatomic lesions and biochemical abnormalities, provided that autolytic changes are taken into account.

President's Page



MEDICARE is a purloined word. The original Medicare program was one to furnish medical attention to the dependents of military personnel in places where there was not available armed service medical attention. A fee schedule was set up— a rather fair one at that, so that civilian doctors could be paid for medical services rendered these eligible military dependents. The program met with favor from the military and was acceptable to the doctors. Those who would put this country under socialized medicine, grasped on to that word for its public relations value. But the package it purported to embrace envisioned neither good medicine nor proper care. In fact, MEDICARELESS might be a better name. To those who heard Dr. Annis at the 116th Annual Session of the South Carolina Medical Association relate of the taxi driver he questioned in England, who stated that he had been to the doctor there five times for examinations and he had never had his shirt off at any of the examinations, it is easy to understand how carelessness can creep into the socialized medicine system. When we realize the enormous cost of the “foot in the door” King Anderson Bill, with its terrific increase in withholding tax, and its provisions to pay the medical bills of the over-sixty-five millionaire, we see how careless the planners are with the money and financial future of those who labor and those who invest.

For those indigent and medically indigent— a far different thing—the Kerr-Mills Act is their salvation. It is workable and acceptable. As the public becomes more aware of the dangers of the King-Anderson type legislation and of the benefits of the Kerr-Mills legislation, we gain more and more support in our fight against socialized medicine.

The Doctor in his role as medical advisor can well assume the additional role of educator.

Frank C. Owens, M. D.

Editorials



Dr. Julian Price

It seems almost unnecessary to recount to the readers of this *Journal* the active and effective career of Julian Price. Born in China in 1901, he attended Davidson College and graduated in medicine at Johns Hopkins Medical School in 1926, afterward serving at the Union Memorial Hospital, the Johns Hopkins Hospital and Bellevue Hospital.

During his practice of pediatrics in Florence since 1928, he has risen high in his specialty and has held numerous offices of trust and importance. He has been a board member or a director of many organizations; he was dean of the Southern Pediatric Seminar at Saluda, Chairman of the Joint Council on Accreditation of Hospitals, Director of the American Medical Educational Foundation and finally a Chairman of the Board of Trustees of the American Medical Association. He is a diplomate of the American Board

of Pediatrics and a fellow of the American Academy of Pediatrics. He is a Phi Beta Kappa, a writer, an editor, and a man of true distinction. He was secretary of the SCMA from 1940 to 1950. He edited the *Journal of the South Carolina Medical Association* from 1941 to 1953 and was for a time a member of the editorial board of the AMA's *Today's Health*. He has contributed many articles to the scientific journals, has written one book, "The Young Doctor Thinks Out Loud," compiled a history of the Pee Dee Medical Association, and produced many other writings.

A sketch of his career appears in *Who's Who in America*.

The Association is most fortunate to have such an able leader to head its activities for next year.

The Annual Meeting in Review

The Association has just completed a very successful annual convention at Myrtle Beach. Attendance was unusually good; for Dr. Annis' Address at the banquet it was necessary to turn away a considerable number of people because of lack of capacity in the dining room.

Election of officers produced the following results: for president-elect, Dr. Julian Price of Florence; for vice-president, Dr. Swift Black of Dillon; for alternate delegate to the American Medical Association, Dr. Thomas Parker of Greenville; for councilor of the 2nd District, Dr. Wyman King, Batesburg; for councilor of the 5th District, Dr. Roderick McDonald of Rock Hill; for the Mediation Committee from the 2nd District, Dr. Garrison Latimer of Cayce; for the Hospital Advisory Council to the State Board of Health, Dr. Belton Workman of Spartanburg and Dr. Ralph Baker of Newberry. All other incumbents were reelected.

The meeting was conducted in a masterly way by Dr. Robert Wilson, president, and



Dr. Wilson and Dr. Annis

extraordinarily good addresses were given by Dr. Annis and Mr. Herlong to large audiences.

Most of the committee reports were accepted as presented. The committee on nursing education was continued and a new joint committee with the Nursing Association to consist of three physicians and three nurses was recommended. It was also recommended that the Board of Nursing Examiners include four doctors and four nurses with a nurse as chairman.

It was decided that lay organizations seeking endorsement of their program should be offered only advice and representation on their boards but not be given blanket endorsement by the Association.

A resolution was passed that a committee be appointed to study enlargement of the benefits of the Kerr-Mills Act. This was referred to council to which the committee will report at its fall meeting.

A proposal that councilors of the Association be elected by members in their own districts was referred to a committee for further study with the ruling that it might be considered at the next annual meeting as an amendment for action.

There was considerable discussion of the resolution suggested by Dr. Thomas Parker condemning area hospital planning on a compulsory basis. No final action was taken and the delegates to the AMA were directed to use their own discretion when the matter comes up at the AMA meeting.

A committee to work with athletic coaches to provide medical care at high school athletic events was created.

It was brought out in one committee report that it was very desirable to explore the classes of various types of membership in order to interest physicians of the state who are not members of the Association.

A committee was created to review the economic practices of hospitals and state supported agencies.

A proposal that a property in Columbia be bought as a permanent home for the Association was disapproved by the House of Delegates.

Dr. Alfred Burnside, chairman of Council, having served nine years on Council, was ineligible for re-election. Dr. Norman Eaddy of Sumter was elected chairman, Dr. William Perry of Chesterfield became vice-chairman, and Dr. Wyman King of Batesburg was elected recorder.

The World Medical Association

This important organization has not received the support which it warrants. Many of us are acutely aware that one of the aims of this body is to preserve free enterprise and professional freedom. Representing as it does the free professional medical associations of nations, it has no connection with any government and is committed to the philosophy that medical and scientific knowledge should



Dr. Owens, new president, and Dr. Wilson, retiring president.

be universally available and free of all political control.

Among its programs are those for bringing properly selected young physicians to the United States for training through scholarship trips, to send medical teams to underdeveloped areas to instruct and prepare local personnel to carry on further training, to conduct major studies in nations of Africa, Asia, and Latin America, to determine the effect of previous health aid programs, and to send American medical students abroad for summer medical clerkships. The nominal dues of \$10 a year would aid very much in the activities of this international body. The address of the United States Committee, Inc. of the World Medical Association is 10 Columbus Circle, New York, N. Y. 10019.

State Hospital Accredited

The State Hospital at Columbia has achieved the distinction of becoming the first mental institution in the southeast to be accredited by the Joint Commission for Accreditation of Hospitals. For this achievement Dr. William S. Hall deserves a great deal of credit and congratulation. Much effort was spent in improving patient care and safety, bringing the records up to date and insuring fire protection.

The accreditation was given to the white division of the hospital and intensive efforts are now underway to improve the status of the Palmetto Hospital, the negro portion of the plant, so that it may achieve the same recognition.

Who Put the Taste in the Calorie

Repelled as we are by the kind of material which generally occupies the television screen, occasionally we get inadvertently caught and with a certain amount of selection, manage to see some very good presentations. As for the commercials, the less said the better. One of the latest ballyhoos for a soft drink raises the question of how so much taste could be afforded by one calorie! No doubt in the minds of many the unit of measurement of heat will now become a gustatory tidbit.



Swift C. Black, M. D.

On May 6, 1964 at the annual meeting of the South Carolina Medical Association, Dr. Swift C. Black of Dillon, S. C. was elected Vice President for 1964-65.

Dr. Swift C. Black was born in Barnwell, S. C. on Sept. 27, 1917, the son of the late Mr. M. E. Black and Mrs. Black, of Dillon, S. C. He moved to Springfield, S. C. at an early age and attended elementary and high schools there. He received the degree of B. S. in Pharmacy at the University of S. C. in 1939. In March of 1943, he received his M. D. degree from the Medical College of South Carolina. While at the Medical College, he was a member of the J. Marion Sims Society, Vice President of the Senior Class, and a member of the Phi Chi Medical Fraternity.

After serving his internship at the James Jackson Memorial Hospital in Miami, Florida, he served as House Physician at the Tri-County Memorial Hospital at Orangeburg, S. C.

He served over two years on Active Duty in the European Theatre of Operations in the U. S. Army. While in England, he took post-graduate work at the University of Glasgow in Scotland, and was discharged from service with the rank of Captain.

In August 1946 he married Susanne Geist, M. D., a graduate of the University of Minnesota Medical School. They located in Dillon, S. C. in September 1946, opening a joint office in the general practice of medicine.

Dr. Black is a member and a Deacon of the First Baptist Church of Dillon. He has served as President of the Dillon Lions Club, President of the Dillon County Cancer Society, and is completing his 16th year as Medical Advisor for the local Draft Board.

He has served as President of the Dillon County Medical Society, Chief of Staff of St. Eugene Hospital, Vice President of the Pee Dee Medical Society. He was President of the S. C. Chapter of the Academy of General Practice during 1961 and 1962. He has been Councillor of his District in the Alumni Association of the Medical College of South Carolina, and is now serving as Vice President of this organization. He is a member of the American Medical Association and the South Carolina Medical Association. Dr. Black is a Mason, a member of the Order of the Eastern Star, and a Shriner. He is a Past Master of Mackey Lodge and Past Patron of O.E.S. Dillon Chapter. He is presently serving as



**Mr. Sydney Herlong and
Dr. Harrison Peeples**

Senior Grand Deacon in the Grand Lodge of Ancient and Free Masons of the State of South Carolina.

Dr. and Mrs. Black have four fine children, Swift, Jr., 15; John, 14; Susanne, 11; and Mary Anne, 6.

Dr. Black's hobbies include hunting, fishing, photography, woodwork, and travel.



BLUE CROSS . . . BLUE SHIELD



by William Sandow

Articles concerning the inflation of cost of items ranging from automobiles to baby diapers fill newspapers and periodicals daily. Generally these comments expound the dangers of the growing tide, if left unchecked, while at the same time pointing up the seeming hopelessness of the situation. The cost of health care and allied fields has been dealt with as severely as any, particularly hospital care, the cost of which has increased steadily and sharply for many years now.

While it is worthwhile to be kept on the alert to the consequences of inflation of *more concern* should be the causes and corrections that will reduce the pull on the purse strings. In this latter category falls the construction of new hospital facilities, for there is a very distinct relationship between the creation of new hospital beds and an increased cost of hospital care.

Blue Cross is inevitably concerned with this relationship. On behalf of its subscribers, it is the state's largest single buyer of hospital care and must, in fairness to those subscribers, take a keen interest in developments that increase the cost of that care.

Blue Cross does not object, necessarily, to the crea-

tion of new facilities. It is concerned, however, that there be proper community-wide hospital planning, both locally and statewide . . . a lack which may result in an expensive duplication of some facilities and a tragic shortage in others.

The people of a community cannot afford to take lightly proposals which vitally affect both their physical and financial well-being. They should insist upon proper emphasis being placed on present needs and future demands. Such questions as the following should have answers by impartial, qualified professionals.

1. Does the area contain already more than enough acute general beds and is the real problem in the use made of these beds?
2. Has too much emphasis been placed on a continual building up of general in-patient facilities at the expense of other equally important phases of health care, i.e.: Preventive, rehabilitative, mental, etc.?
3. If new facilities are indeed necessary, are higher cost facilities being built and proposed, when lower cost ones would suffice?

The people should bear in mind, what has been

previously pointed out, that there is a very real relationship between new facilities and increased cost of care, quite apart from the obvious initial cost of construction.

The hospital bed which today costs \$21,450 to build and equip will cost approximately \$5,300 to maintain in its first year in operation. The per bed maintenance cost will increase by 6% to 8% each year thereafter. (Even if the bed is not actually used, the maintenance cost will be 75% of the cost of one being used.)

In January of this year, 312 new acute general beds were in either the construction or the planning stage across the state. When finished, they will have added \$6,630,000 to the state's total hospital bill. This must be paid off over the coming years. In addition, these beds will add \$1,650,000 to next year's operating costs. Each succeeding year, as long as these beds are open, this amount, increased by 6% to 8% annually, will be added.

Obviously, the increased costs of operation are going to have to be met, in part, by higher charges for care, charges leveled directly at the consumer-patient.

Just recently the President of the Blue Cross Association testified on HR 10041, containing amendments to what is popularly known as the Hill-Burton Act. This testimony summed up the Blue Cross position and, as well, stated some facts and principles that may well apply to South Carolina. In part, the testimony is as follows:

"Blue Cross Plans feel that the hospital survey and construction act . . . has served useful purposes . . . but wishes to underscore several considerations. In conjunction with construction and programming emanating entirely from voluntary sources, the act has involved the government in the construction of beds based on varying concepts of need; it has contributed in some part, through focus on acute in-patient facilities, to the imbalance existing among preventive, acute, sub-acute and rehabilitative services; and it has put at times excessive emphasis on small hospital construction in areas where fewer and larger hospitals, with the existence of ever-improving transportation, would be more productive . . . *A matter of prime importance is the development of better planning criteria. In some sections of the country bed need formulas call for almost twice as many acute beds per thousand population as in other sections.* The proportioning of resources among types of facilities and services, such as general and special hospitals, nursing homes and ambulatory services, varies greatly also . . . Also of major importance is the need for discipline in the modernizing of, or expansion of, old facilities and in the building of new

facilities . . . Some state agencies, limited largely by the influence of government money, are attempting to promote continuity of care through a concept of regionalization; but, in fact, many areas of the country, while they might have paper plans, have little more . . . It is an established fact that once a hospital bed is provided there is a strong tendency for it to get used and, as a result, to increase the community health bill. On top of initial capital costs follow years of operating costs . . . Amendments to the hospital and survey construction act should make firm provision for the development of planning criteria so that concepts of need are not so widely variable. Strong support should be given to the development of voluntary planning organizations on market trading areas and state levels. These should work in cooperation with state agencies and provision should be made for experimentation with several patterns . . . Recognizing that the way money is spent affects the quality and effectiveness of care, our stress, in essence, is upon the need to assure the consumer that the provision of care is related to need, not only in total amount, but in kind . . ."

In summary, Blue Cross takes the position that it is pure common sense that there be established reliable standards for determining building needs and that there be instituted community-wide planning systems which will be guided by knowledge of these needs rather than by mere hit-and-miss theory.

There is, after all, only so much local tax money, Hill-Burton money and paying-patient money to be had. The saturation point eventually will be reached. It is imperative that, before that happens, the monies available for health care be deployed, with wisdom and economy, to secure the broadest range of care including the best facilities and the best and newest techniques available. Only thus, in an age of tremendous medical advance, can the institutions charged with the total health care needs of the people put within economic reach the blessings of that advance.

In our scrambling century, gentilesse is a vital part of the physician's gift to society. It is of this quality—and of the lack of it—that the Rev. Reuben K. Youngdahl writes this month in *The Lutheran*:

"In East Africa a group of natives, having made a long journey seeking medical care, walked right past a government hospital to reach a mission hospital. When asked why they had walked the extra distance, when the government hospital had exactly the same medicine, they replied. 'The medicine may be the same, but the hands are different.'"

AMA News

News

Physicians-Nurses

In line with the current interest in nursing problems, a 90-minute discussion, sponsored by the AMA's Committee on Nursing, will be held during the annual convention of the AMA in San Francisco in June. The subject of "Joint Planning of Patient Care by Physicians and Nurses in the Hospital and Home" will be presented to a combined audience of doctors and nurses.

Affiliate Members of the AMA

The AMA has encouraged state and county medical societies to solicit nominations for affiliate memberships in the AMA. Extensions of this type of membership have obvious advantages in sustaining interest among the people who are not physicians but have interest of various kinds in the organized activities of medicine.

A recent *AMA News* discusses the broadened categories of affiliates. Nomination for affiliate membership is by county or state medical society and approval is by the House of Delegates of the AMA. Among the categories of persons desired as affiliates are dentists, various teachers of medicine or of the

allied sciences, scientists in allied sciences, with some certain qualifications as to eligibility.

Affiliates pay no dues and do not vote but are entitled to attend AMA scientific meetings and to receive AMA mailings, including the *AMA News*. They may also subscribe to AMA publications at half rates.

It would seem to be a good move to encourage such affiliations.

Dr. Jean Morgan

At a recent meeting of the Sumter-Clarendon Medical Society, the speaker was Dr. Jean Morgan from the Medical College of South Carolina. Her subject was "Management of Acute Oliguria."

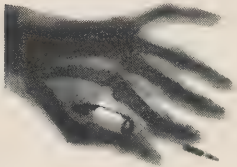
Dr. Morgan has been at the Medical College of South Carolina since November, 1963 as assistant professor of medicine.

Dr. O. B. Mayer

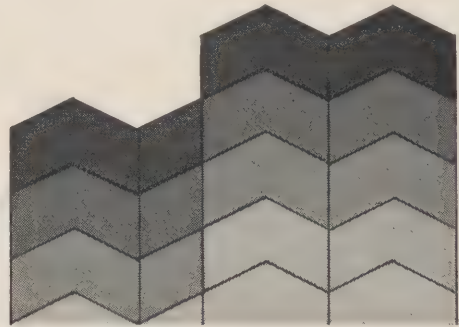
Newberry college awarded three honorary doctorates during its commencement exercises, May 31, Dr. A. G. D. Wiles, Newberry's president, announced.

The doctor of Medical Science degree was

of all oral corticosteroids:

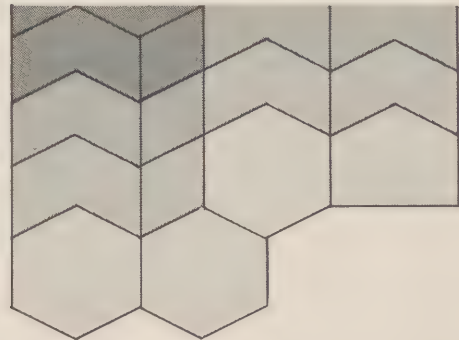


one of the most
powerful antirheumatic
glucocorticoids yet
synthesized¹



among the highest on the activity spectrum
among the lowest on the cost spectrum

priced substantially
lower than the majority
of analogous compounds



awarded to Dr. Orlando Benedict Mayer, III, of Columbia.

Dr. Mayer, a native of Newberry received his A.B. degree from Newberry college in 1917, and thereafter attended for two years the Medical College of South Carolina. Transferring to the Medical School of Western Reserve University in Cleveland, Ohio, he was graduated from that university in 1921 with an M.D. degree. Following completion of his internship and residence work, he earned his M. A. degree from Western Reserve University.

He began practice of internal medicine in Columbia in 1924.

Dr. E. Gaine Cannon

Dr. E. Gaine Cannon, formerly of Pickens and founder of Cannon Memorial Hospital was honored in special ceremonies on the Pickens County Courthouse steps on April 16.

U. S. Rep. Robert W. Hemphill of the 5th Congressional District was a featured speaker.

Dr. Cannon, also founder of the Albert Schweitzer Memorial Hospital at Balsam Grove, N. C., appeared at the Village Library on Court Street for an autograph party in his honor.

He autographed copies of a recent book published by the Morrow Co. of New York. The book relates details of Dr. Cannon's work at Balsam Grove and is by LeGette Blythe of Huntersville, N. C.

State Good Samaritans Free From Penalty Now

There was a day in South Carolina when a doctor, coming upon the scene of a death- and injury-dealing accident, would turn his head and leave as quickly as he could.

He was using only ordinary prudence. Had he stopped and given first-aid treatment, he later could have been sued by the victim whom he had helped. There would have been a good possibility, too, that the victim could collect on one or more grounds, including malpractice.

That day is ending in South Carolina. Greenville County Sen. P. Bradley Morrah, Jr. and Reps. Richard W. Riley, Rex L. Carter and Fred A. Fuller, Jr. joined forces to pass a Good Samaritan act in the General Assembly, and it will become law when Governor Russell signs it.

The act includes but goes beyond emergency treatment by physicians, and exempts from liability for civil damages anyone who, in good faith and without charge, renders aid to an accident victim. That makes it even stronger than similar laws of other states which were intended primarily for the protection of doctors.

Thus ends a ridiculous situation which potentially carried punishment for anyone who, acting from compassionate instincts and motivated only by a desire to save life and alleviate pain, went to the aid of a dying or seriously hurt person.

DEXAMETH (dexamethasone) exerts a prompt and potent ameliorating effect in patients with rheumatoid arthritis²; symptoms of inflammatory reaction are quickly suppressed in a substantial proportion of patients, joint stiffness is relieved and function improved.

DEXAMETH (dexamethasone) is less likely than some of the older steroids to produce electrolyte imbalance, hypertension, and disturbance in carbohydrate metabolism. Abnormal weight gain may limit the usefulness of the drug in some patients, but may be advantageous in others.

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TABLETS 0.75 mg.
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Dosage: In rheumatoid arthritis, the initial daily dosage ranges from 1.5 to 3.0 mg. The dosage is then decreased gradually to the minimum that will maintain sufficient relief; this may be as little as 0.75 mg. per day. After extended therapy, it is especially important that the drug be withdrawn gradually to allow recovery of normal adrenal function.
1. Ringler, I., West, K., Dulin, W. E. and Boland, E. W.: *Metabolism* 13:37, 1964.
2. Black, R. L., et al.: *Arthritis and Rheumatism* 3:112 (April) 1960.

PRECAUTIONS: At therapeutic dose levels, **DEXAMETH** (dexamethasone) may have less tendency to cause sodium or water retention, potassium excretion, disturbance in glucose metabolism or hypertension than some of the older steroids. With these exceptions, however, the drug may give rise to the metabolic and hormonal side effects characteristic of corticosteroids. It should, therefore, be used with great caution in the presence of tuberculosis and other infections, osteoporosis, peptic ulcer, fresh intestinal anastomoses, diverticulitis, thrombophlebitis, herpes simplex, psychotic tendency, pregnancy and in persons exposed to chickenpox, measles or scarlet fever.

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Dr. Samuel T. Haddock

Dr. Samuel T. Haddock, 107 Calhoun St., Anderson, has been elected a fellow of the American Academy of Pediatrics, according to E. H. Christopherson, M. D., of Evanston, Ill., executive director.

The doctor met the Academy's eligibility requirements which include: special training and experience, certification by the American Board of Pediatrics, high ethical and professional standing, clinical experience and productivity in pediatric activities.

Dr. Oliver E. Gilliland, Jr.

Dr. Oliver E. Gilliland, Jr., Woodruff's Young Man of the Year in 1963, and Mrs. Gilliland were appointed missionaries to Indonesia April 16th by the Southern Baptist Foreign Mission Board. Now a pediatric resident at North Carolina Baptist Hospital, Winston-Salem, N. C., Dr. Gilliland was a general practitioner in Woodruff and nearby Enoree for nearly six years.

Medical Aid For Aged Financial Limit Raised

The State Welfare Department is increasing eligibility status for medical aid to the aged in South Carolina under the Kerr-Mills Act.

The act provides aid to the indigent. Income in excess of \$1,300 annually for a single person, or \$2,100 for a couple, disqualifies applicants.

The department said these figures are being raised to \$1,400 and \$2,400, respectively.

Dr. Fisher, Director of Radiology

Dr. Samuel H. Fisher of Greenville has been appointed director of the radiology department at Greenville General Hospital, according to hospital director Robert E. Toomey.

A native of Philadelphia, Pa., Dr. Fisher received his bachelor, medical and master of science degrees from Temple University School of Medicine.

He has practiced in Greenville since 1947. He was appointed chief of the Radiologic Service in 1950. He is also a consulting radiologist at the Shriner's Hospital for Crippled Children.

He is a member of the American Medical Association, the South Carolina X-Ray Society, the American Roentgen-Ray Society, and is a diplomate of the American Board of Radiology and a fellow of the American College of Radiology.

South Carolina Tuberculosis Association

Dr. Robert L. Crawford of Lancaster has been elected a representative director of the Association and Drs. W. J. Snyder of Sumter and S. E. Miller of Georgetown have been elected directors-at-large. Dr. Frank L. Geiger of the State Board of Health spoke to the Association's 47th annual meeting and Dr. William A. Cook of Charleston outlined the work done by the Christmas seal funds and the long-range program for eliminating tuberculosis.

Dr. R. W. Hanckel

Dr. R. W. Hanckel, professor of otolaryngology at the Medical College of South Carolina, has been elected vice president and chairman of the southern section of the American Laryngological, Rhinological and Otolological Society. He was elected at the annual meeting of the society in San Francisco earlier this month.

Dr. J. I. Waring

Dr. Joseph Ioor Waring was honored with a reception at Gibbes Art Gallery April 21 at 8:15 p. m. upon the occasion of the publication of his book "A History of Medicine in South Carolina, 1670-1825."

Dr. Reynolds

Dr. Reynolds, from Mississippi, has elected to serve as general practitioner for Harleyville and surrounding communities, with offices located in the Harleyville Medical Clinic.

Dr. Reynolds is a graduate of Louisiana State University, premed and medical, has had two years experience doing general practice in Louisiana.

Radiation Treatment Unit Due

The first cobalt unit in South Carolina for radiation treatment of cancer patients will be available at South Carolina Baptist Hospital by early summer, according to Superintendent William A. Boyce.

Dr. Carter Maguire

Dr. Carter P. Maguire of Charleston has been re-elected secretary of the Southeastern Society of Plastic and Reconstructive Surgeons.

He was elected during the society's annual meeting in Lexington, Ky.

Charleston's other plastic surgeon, Dr. Robert F. Hagerty, was on the meeting's scientific program. He presented a paper on cleft palate.

Dr. J. Anthony White

Dr. J. Anthony White, an Easley physician, is among eight "Wofford Associates" recently named by the board of trustees of Wofford College.

Obstetric-Pediatric Seminar

The 14th Annual Postgraduate Obstetric-Pediatric Seminar which is sponsored by the Maternal and Child Health Divisions of the State Health Departments and the Maternal Health Committees of the State Medical Associations of Georgia, Florida, Alabama, Mississippi and South Carolina is scheduled to be held August 20-21-22, 1964 at the Daytona Plaza Hotel, Daytona Beach, Florida. The Seminar is approved for credit, 12 hours, Category I, by the American Academy of General Practice. There is no Seminar registration fee.

Doctors in the News

Dr. John Pratt spoke to the Rotarians of York on the dangers of cancer. Dr. Pratt cited South Carolina statistics on cancer and showed a film on the cancer danger signals.

Dr. Warren H. Orr told members of the Inman Lions Club that the group of sulfa drugs now on the market is far superior to the ones offered to the public in recent years. Dr. Orr's talk was based on the progress made in the development of prescription drugs during the past 35 years.

Dr. D. T. E. Whitaker, radiologist at Greenville General Hospital, addressed the members and guests of the South Carolina Society of X-Ray Technicians at their annual banquet in Greenville.

A pediatric treatment room in the Conway Hospital was furnished as a memorial to **Dr. Paul E. Sasser**, first physician to specialize in the practice of pediatrics in the Conway Hospital.

Dr. Walter L. Gaillard, Anderson physician, was named president of the Anderson County Tuberculosis Association. **Drs. J. J. Davis, Grady Callison, and Charles H. Browne** will serve as directors of the Association.

Dr. John F. McLaughlin, Ehrhardt physician, spoke to the Bamberg County Tuberculosis Association.

Drs. Robert Black and N. J. Knoy attended the annual convention of the Southern Railroad in Durham, N. C. Dr. Black served as surgeon of the company for 35 years and retires this year. He will be replaced by Dr. Knoy.

Dr. John M. Preston, director of the Richland County Health Department, was keynote speaker at the annual meeting and banquet of the Calhoun Tuberculosis and Health Association in St. Matthews.

Dr. D. B. Gregg has left Pinehaven Hospital of Charleston to go with the South Carolina Board of Health.

New Members, SCMA

Dr. LeRoy C. Mims
Camden
Dr. William F. Ward
Cayce
Dr. Earl R. Jones
Florence
Dr. John E. Griffin
Marion
Dr. James L. Bland
New Ellenton
Dr. Michael Valverde
Ruby
Dr. B. C. Phillips, Jr.
Williams

All the following from Charleston:

Dr. A. Reid Allison, Jr.
U. S. N. Hospital
Capt. Harry J. Alvis
Shipyards Dispensary
Dr. James W. Bland, Jr.
350 Maybank Hwy.
Dr. Walter M. Bonner, Jr.
55 Doughty St.
Dr. Benjamin H. Curry
55 Doughty St.
Dr. Samuel H. Freas
St. Francis Xavier Hosp.
Dr. Horry H. Kerrison
142 Wentworth St.
Dr. William H. Lee, Jr.
55 Doughty St.
Dr. Redden L. Parramore, Jr.
65 Gadsden St.
Dr. Stephen E. Puckett
55 Doughty St.
Dr. Elwood Q. Seymour
St. Francis Xavier Hosp.
Dr. Julian R. Youmans
55 Doughty St.

Deaths

Dr. B. D. Frierson

Dr. B. Douglas Frierson, 33, was killed in an auto accident in Topeka, Kansas, April 12.

Born in Anderson County on April 19, 1930, Dr. Frierson was graduated from the Anderson Boys' High School, the University of the South in Sewanee and the Medical College of South Carolina.

Dr. L. E. Davison

Dr. Leo E. Davison, 49, of Anderson, died after practicing in that town for eleven years.

Dr. J. H. Murdoch, Jr.

Dr. John H. Murdoch, Jr. of Charleston died April 28 at his residence.

Dr. Murdoch was assistant professor of clinical pathology at the Medical College and had served there since 1941. A native of Charleston and a graduate of the University of Virginia and the Medical College of South Carolina, he served in the U. S. Air Force Medical Corps during World War II and attained the rank of major.

NURSING EDUCATION TODAY

Part 5: Role of the Doctors

J. DECHERD GUESS, M. D.

Greenville, S. C.

Some would say that doctors no longer have a role in nursing education. With such an attitude of resignation and frustration, I do not agree. I shall try in this article to indicate why I believe that doctors should still have an important part in nursing education, both undergraduate and in continued learning after graduation.

It is true that in most training schools, doctors have been eliminated entirely from any part of formal training. That is true of classroom teaching. It is also true of undergraduate training and instruction in the wards, the operating rooms, the delivery and labor rooms, and the emergency, or accident room. As if by deliberate intent, the doctor rarely comes into contact with student nurses. It is also true that unless he formally requests it, he rarely is accompanied on ward rounds by a staff nurse. It is an interesting paradox that the doctor frequently is accused by educational directors of making no effort to give clinical instruction to nurses as he visits his patients, while at the same time he is denied an opportunity to do so by the fact that he is not accompanied by a nurse on his visits. Neither is he invited to participate in clinical conferences of the class in nursing.

Doctors, as individuals, cannot demand that places be made for them on the teaching staff. They lost the places they once held by failure to keep teaching appointments, by poor preparation for those appointments, and by the delegation of teaching, all too often, to junior members of the professional staff. Teaching by doctors, to be appreciated and respected by the well trained teachers employed now by training schools, must be done by capable, interested, older staff members.

What at one time, perhaps, was considered by doctors to be a rather unnecessary chore, is recognized by them now to be of significant importance in nurse training, not only because it provides information, but also because it stresses important points in the clinical application of knowledge, and it maintains liaison between the eager student with the inquiring mind and the master, who is chief of the medical team.

We doctors, or clinicians, believe that doctors should instruct nurses in applied and regional anatomy, in elementary physiology, in diagnostic symptomatology, and in pharmacology and drug therapy. Only the doctor can bridge the gap between the pure science involved and its clinical significance in care of the patient.

Besides formal instruction in basic and applied concepts in those subjects of medical science, teaching appointments afford opportunity for contact and association between student and physician, which leads ultimately to cooperative endeavor of the interested and efficient helpmate and the doctor in rendering medical service. How can the student nurse project in her thought and attitude towards her medical chief the respect and affection which she had for the girlhood family doctor and friend, if she no longer comes into association with him in the relationship of teacher and learner?

The almost complete elimination of the doctor as an instructor in schools of nursing is not due wholly to either his reluctance to serve or to the pressure of his practice upon his time and energy. There has been a continuing effort by nurse educators to build up the prestige of nursing as a profession independent of medicine and equal to it in both dignity and responsibility for the care of the patient. A significant part of the technique of accomplishing that purpose has been a consistent "low rating" of the doctor, more often by insinuation or avoidance and less frequently by more direct attack.

The medical profession, notwithstanding its achievements in the care of the sick, in diagnosis, and in treatment, in a remarkably lengthened life expectancy, and its own greatly improved economic status with resultant more comfortable living, less financial apprehension, and greater opportunities for its children, has suffered attacks on several fronts. Its ability to manage and direct health care in all of its aspects is questioned and denied by many.

Perhaps, the doctor's sense of having been downgraded began with the accreditation of hospitals. Although the program of inspection of hospitals was a project of the profession through its several organizations, the independent staff physician reacted adversely to the program because of its rather detailed requirements of him and his professional activities. He was inclined to look upon it as an affront to his independence of professional action.

Maintenance of accreditation rating came rapidly to be a matter of greater importance to hospital management than it was to the professional staff. There resulted a multiplicity of regulations of hospital practice, made and policed by or at the direction of hospital management.

As the costs of hospital operation increased, as deficits mounted, as a more personal interest by people of the community developed, lay control of hospitals through governing boards selected by it has become increasingly more direct in every area of

This is the last of a series of articles dealing with modern nursing and nursing education.—The Editor.

hospital operation. Doctors no longer run the hospitals. They are allowed to practice in them so long as they comply with board devised stipulations. Doctors have come slowly to accept, more or less gracefully, the new order.

The public, as individuals, by political pressure and by pressure exerted by industrial and labor organizations, is denying more and more insistently that doctors are omnipotent in all matters relative to the provision of good medical care to all people, a concept of right which is gaining wide acceptance. The public is demanding a determining voice in the selection of a satisfactory plan of financing universal medical care. Organized medicine has not acceded to the wisdom and soundness of proposed plans. Even its own plan of prepaid, service type, medical insurance is not universally accepted by the profession. However, many individual doctors and several less influential professional groups are not only sympathetic with, but are leaders in demanding changes in traditional medical practice and its financing. As time goes on, organized medicine relents a little here and concedes a little there. Actually, it is fighting a defensive and losing battle, or so it seems to the writer. The public image of the doctor has changed along with changing public attitudes towards patterns of medical practice. The change has been encouraged, no doubt, by the streamlined, the more rather than less, impersonal kind of professional service which too great demands by too many patients have made necessary. Granted that there are many individual exceptions, the public no longer loves or trusts its medical adviser as it once did. Many people are highly critical of the profession, and its attitudes and its methods. All too many people are jealous of the prosperity, and the independence of doctors and their freedom from the necessity of obligatory retirement.

These assaults upon the image of the doctor have been damaging to the physician's pride and to his sense of superior wisdom in the direction of all things medical. As a group, adjustments have been made or are being made, but reluctantly and slowly. Perhaps, none of the changes in the status of the doctor has caused him more frustration than those referable to nursing education and nursing service. There are several factors involved. Perhaps, the most realistic factor, and one which involves hospital administration and the comfort and satisfaction of the sick public and its friends and loved ones even more realistically than it does doctors, is the fact that hospital patients are receiving neither good nor safe nursing care. The so-called "philosophy" of nursing and the expressed objectives of nursing educators are directed towards safe and efficient nursing in a broad range of specialized activities. Doctors wish for their patients, not only safe nursing care but good care as well. Good nursing care is much more than safe care. It is kindly, understanding, and sympathetic. It is associated with initiative, foresight, and helpful suggestion. It is not only patient directed. It

is admittedly associated with helpful cooperation with the doctor. The nurse is the doctor's eyes and his ears. She helps him build morale. She, if she is to give good care, must have been taught to see and to hear and to recognize the significance of signs, symptoms, reactions, fears, and changes in attitude of the patient, and to communicate what she sees and hears and feels to the doctors. Ability to do those things is not acquired by a textbook study of physiology, sociology, or human relations. The average staff nurse is not doing those things. True it is that there are too few of them on duty at any one time to spend much time with any one patient, and hence they cannot function efficiently as eyes and ears of the doctor. Perhaps, it is because they see and hear so little, that their nurses' notes are so barren of useful information. Since they do not see the doctor or go with him on his visits to the patients, they do not communicate with him. It seems that they do not communicate with each other. The nurse on duty on one shift, has or seems to have little or no information as to what happened on her wards on the preceding shift. The fact that she was not on duty at that time seems to be an accepted reason for not knowing what transpired. There appears to be little or no continuity of information. That lack is not a part of either good or safe nursing.

What can the doctor do to improve the quality of nursing care, using his observations and experience as criteria rather than those of the too ambitious, too theoretical, too aggressive group, which has gained control of the formulation of nursing education, and has removed from nursing service the priority of sympathy and kindness, qualities which arise in the heart (the seat of the emotions) and can be taught only by example and not by precept?

The doctor has already made a start to regain some influence in the education of nurses and the improvement of nursing services. The AMA has a standing committee on nursing. The House of Delegates in 1959, "through adoption of a report and resolutions, noted 'a reactivated intent to establish an effective liaison with our nursing colleagues, based on the best possible mutual understanding and respect.' That reactivation . . . must be supplemented by similar interest and concern on the part of component and constituent societies, and indeed on the part of each physician."³

The council of the South Carolina Medical Association has set up a committee on nursing. An interim report from the committee was included in the minutes of the meeting of council and printed in the *Journal of the SCMA*.²

Governor Russell, early in the year, appointed an advisory committee to study causes and to recommend ways of alleviating the serious shortage of nurses. A summary of the report of this committee was a part of the report I prepared for *The Journal*.⁴

At the Governor's suggestion, the Board of Trustees of the Medical College set up a standing committee on nursing. Its primary purpose was to

provide liaison between the doctors of the state and the Governor's advisory committee. Unfortunately because of time differences in schedule and the urgency of the Governor's committee to submit its report before meetings of the State Budget and Control Board began, there was no other contact between the two committees, except the exchange of reports.

The Committee of the Board of Trustees of the Medical College was invited to sit in with the council's committee and to participate in its discussions, which it did. The final report of the council's committee will be made at the time of the Medical Association's annual meeting.

For doctors to participate in the solution of the problems facing our people, our hospitals, and our training schools, it is essential that they understand the underlying causes of the problems. In this series of articles, I have tried to present them, as I have come to understand them, after considerable study of recent literature dealing with nursing education.

The reader would find both interesting and instructive the article, "Educational Programs in Nursing and Related Career Opportunities" which was first printed in the AMA Journal, and which was repeated in this journal.³

The only recommendation of the Governor's advisory committee which seemed to interest the Governor immediately was that the Extension Division of the University of South Carolina undertake to provide instruction in required liberal arts and general and social science subjects to students enrolled in hospital training schools. If this were done, a difficult problem of several schools would be solved, and such state aid (for it would amount to a subsidy at an estimated cost of \$102,000.00) might make it possible for new schools to be established.

The Governor invited the writer to meet with the State Budget and Control Board and to discuss with it the problems involved in the shortage of nurses, so as to give the Board a broad understanding of the background of the problem. Dr. N. P. Mitchell, director of the Extension Division of the University, met with the Board the following week to discuss the costs of the proposed project.

There is a "catch" in the recommendations of the

Governor's committee. The aid of the University in teaching required subjects in liberal arts and general and social sciences would be available to those schools only which agreed to attempt to raise their standards by July 1, 1969 to those required by the National League of Nursing for accreditation by the League.

Should the recommendation of the Governor's committee find favor with the Budget and Control Board, and should money to activate it be included in its budget recommendations, or should it come before the General Assembly in any other manner, it should be actively supported by the medical profession, except that the profession should vigorously oppose inclusion of the proviso that all schools applying for such state subsidized instruction must pledge themselves to attempt to meet by July 1, 1969, the requirements for accreditation by the National League of Nursing. This should be done on both the grounds that the League is an extra-legal body and that it is not sympathetic with the educational problems in our state.

Finally, in discussing what doctors can do to regain some voice in the training of students of nursing and that they may be able again to participate actively in the scientific background of good nursing practice, I refer you to the last previous article in this series.⁵

It was my suggestion that each County Medical Society establish a standing committee on nursing; that each of these committees use its influence to have established by each organized hospital staff in its county a staff committee on nursing education and nursing service; that the several staff committees study the problem relative to nursing education and nursing service and that they seek to exercise an advisory and cooperative influence in efforts to improve nursing education and service in their hospitals.

Attempts at coercion, ridicule, and unwarranted or harsh criticism of the educational staff of the hospital would be disastrous. Understanding of the problems involved, along with kindly suggestions and offers of cooperative effort towards their solution might possibly produce remarkable results. The attempt would be worth the effort.

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A PHARMACIST'S PROJECTION OF HEALTH SERVICES

J. HAMPTON HOCH

*Department of Pharmacognosy
Medical College of South Carolina*

Since Pharmacy is an integral component of the health service team charged with the responsibility of community health, it is natural that pharmacists, as well as physicians, dentists, nurses and other segments of the health team, speculate as to future developments of health care. It is likewise natural that wishful thinking has a strong tendency to color one's speculations, despite a desire to be completely objective.

It seems likely that the hospital will become the primary focus and center of community health activity. It will not be too long before most towns with populations above five thousand will have a community hospital or health center.

Physicians' offices will tend to gather around such a center. Close proximity will permit centralization of equipment and personnel that can be shared. Thus the professional nucleus of hospital and immediate environs can provide more economic service to patients. By avoiding wasteful duplication of equipment and facilities and by providing more specialized services from the limited number of personnel available for laboratory and technical assistance, the patient will benefit.

More and more community physicians will concentrate their practice in particular fields of medical service. This will promote organized groupings of specialists to provide more comprehensive coverage for each community and reducing the need for referrals to large medical centers.

Home care of the patient will expand (? as a division of the outpatient department) to furnish necessary services and simultaneously reduce hospitalization costs and bed-space pressures.

Physical proximity of all community health personnel should promote both awareness and better general understanding and appreciation of the role of each profession. The development of positive, preventive health programs of outpatient care, immunization campaigns, health education programs, etc. will become more effective by the combined efforts of all parts of the health team.

More comprehensive health insurance programs

and group practice seems destined to spread more widely and have increasing socio-economic effects.

If the above projections are essentially correct, what are the implications for Pharmacy?

The hospital pharmacy service and adjacent prescription pharmacies will assume a larger share of the prescription services of the community. This could be a major factor in reducing self-medication by the general public.

Since team activity implies coordination, the need for knowledgeable coordinators to guide and direct such efforts in the health field is a *sine qua non*. A new area of professional achievement for adequately prepared and experienced pharmacists thus looms on the horizon.

Concentration of professional pharmacy service around the health center or hospital nucleus will likely promote greater standardization of drug inventories, from more uniform prescribing practices. If this is a correct assumption, it will make for greater economy in pharmacy operation and lower cost to the patient.

There will be a need for more "elder statesmen" from pharmacy—well-informed professionals with a deep interest in the whole field of health services to the public and especially in the pharmacy component of such services. Educators—not spokesmen for professional, industrial or trade groups — would seem, currently, to comprise an available pool for this role. For future requirements a special "breed" of pharmacists is needed; men trained in a broader pattern of health science knowledge and experienced in tangent areas. Someone will fill this gap—perhaps men less well informed, less well motivated, and with more vested interests—if Pharmacy fails to develop its professionals for this task.

The picture over-all seems to point to the need for a mechanism that will assure the patient's receipt of the full benefit of wide-range attention available from specialists of the health team. Skillful coordination is requisite to achieve the best service for the patient.

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Book Reviews



THE ATRIOVENTRICULAR NODE AND SELECTED CARDIAC ARRHYTHMIAS, by David Scherf and Jules Cohen. Grune and Stratton, Inc., New York and London. 1964. Pp. 466. \$18.75.

This book depicts selected disturbances of cardiac rhythm which have some relation to the atrioventricular

node. Prior to discussing arrhythmias, the anatomy and physiology of the AV-node are described, introducing many new ideas and features. The explanations, diagrams and tracings are very clear and can be understood by anyone in medicine and especially appreciated by experts in this field. At times too many views and theoretical concepts are listed which can cause distraction from the clinical significance and also the organization of the book. The bibliography is very extensive.

This book is an excellent one for the person interested in clinical and research aspects of arrhythmias related to the AV-node. It is probably too advanced

for the beginner although he could use it satisfactorily as a reference. P. C. Gazes, M. D.

PHYSICAL DIAGNOSIS. John A. Prior, M. D. and Jack S. Silberstein, M. D. The C. V. Mosby Company, St. Louis, Mo., 1963. \$8.50.

The authors state that the basis of this textbook is to teach the student how to obtain a good medical history, how to perform a satisfactory physical examination, and how to develop a medical vocabulary.

The arrangement of the material and the division of the content is good.

The authors have attempted to keep this text confined to the essentials needed by a student, omitting all unnecessary discussion of disease.

Heart sound tracings with ECG timing have been included to delineate further pertinent observations relating to the auscultation of the heart.

Special sense examinations, the techniques for mental examination, and the requirements for pediatric examination have been clearly and succinctly incorporated in appropriate chapters.

As a textbook for instruction of medical students in the fundamentals of physical diagnosis, this should prove to be a popular and useful book. Its brevity, clarity, and excellent illustrations make it a very commendable book. Vince Moseley, M. D.

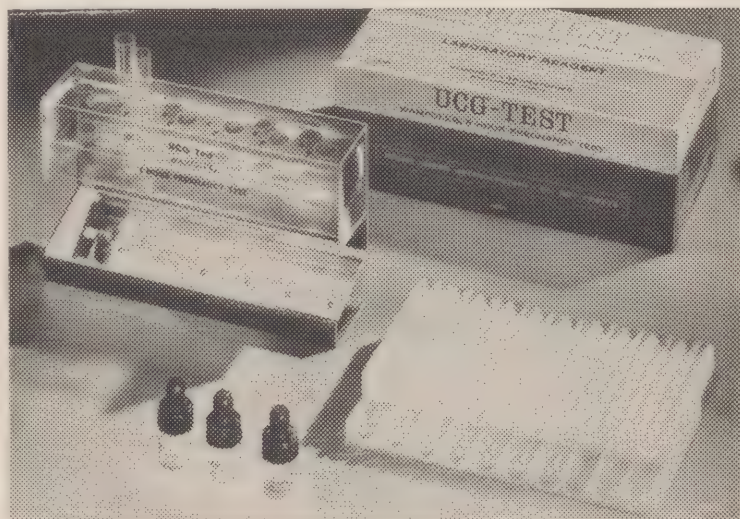
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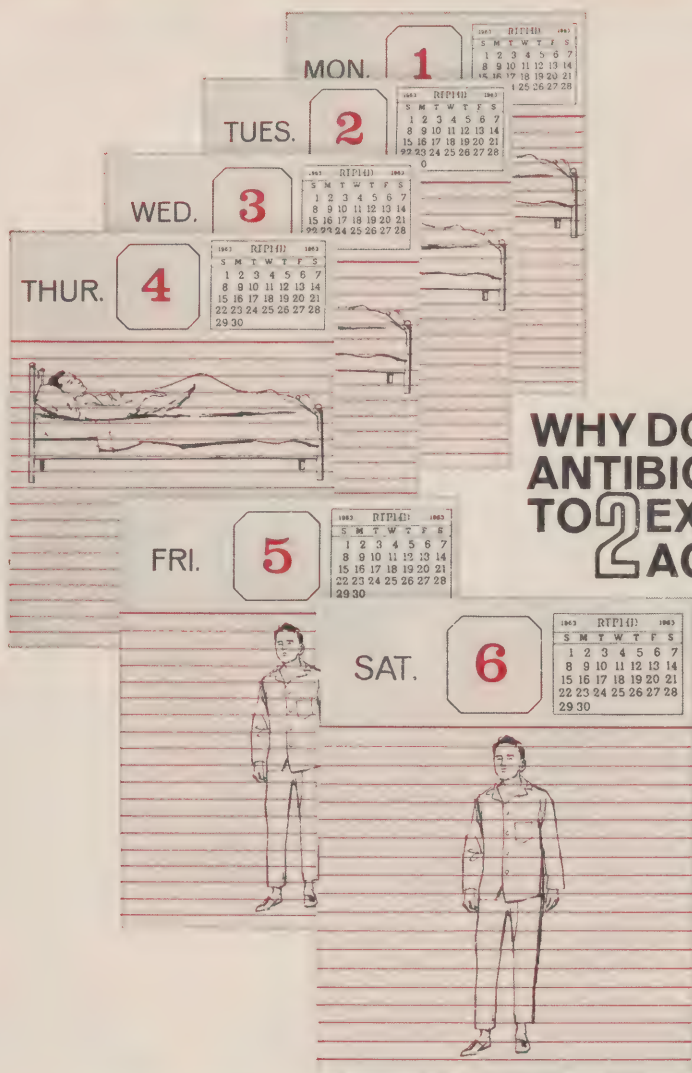
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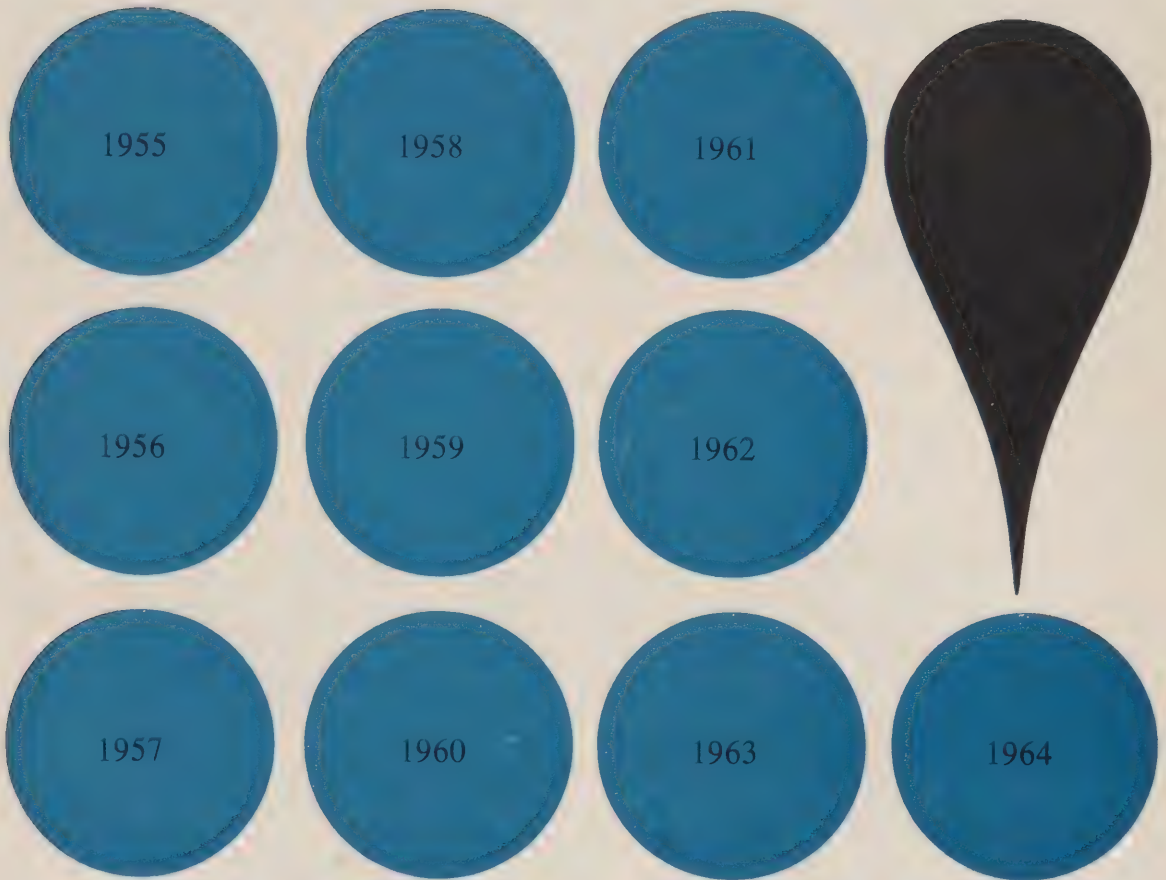
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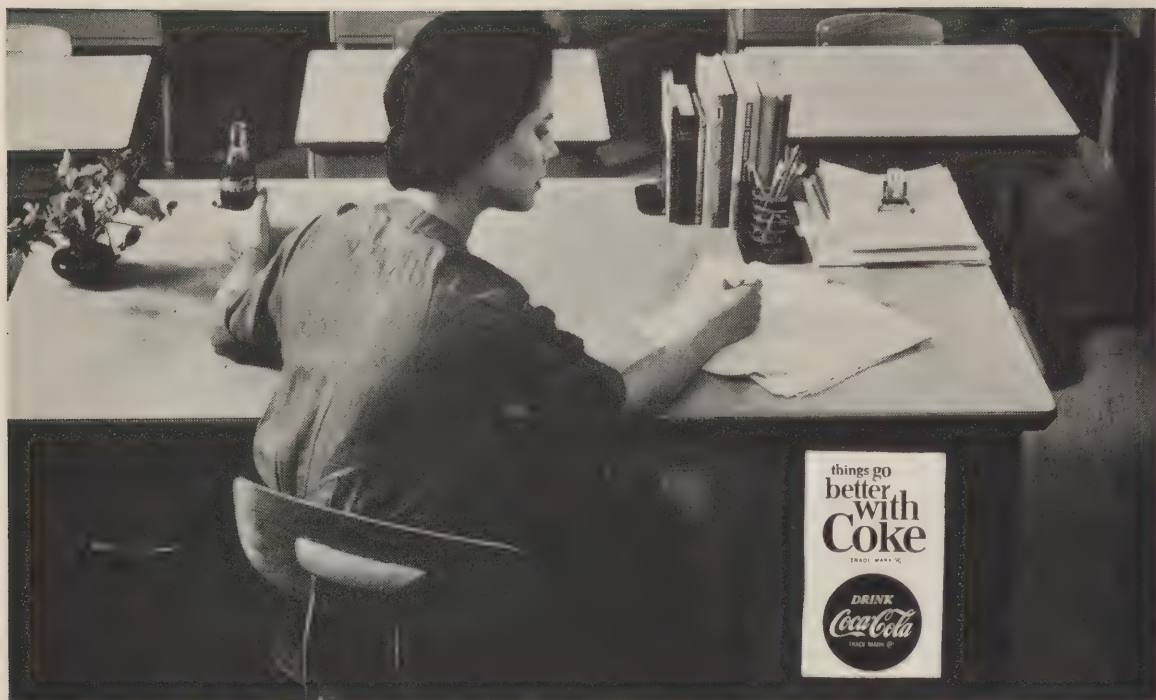
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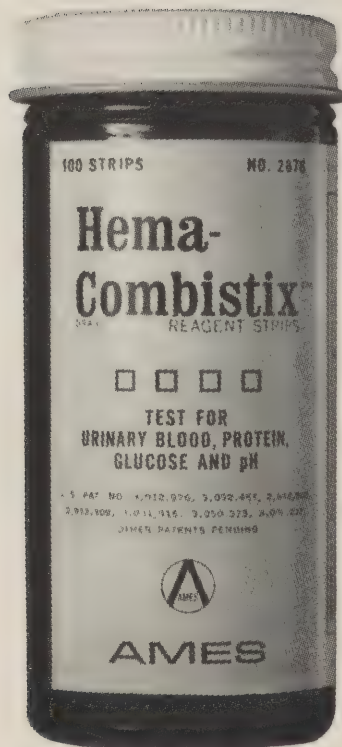
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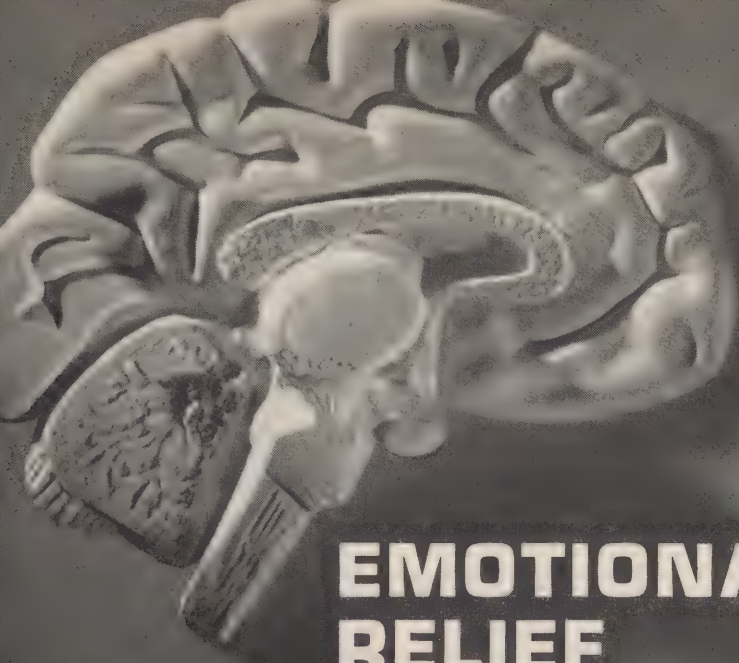
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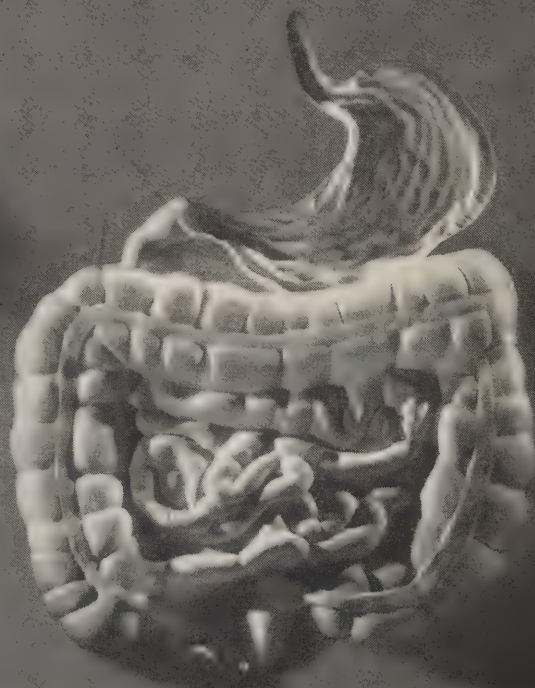




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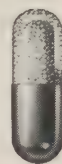


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to patients with suicidal tendencies. Massive overdosage may produce lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse. Consider possibility of dependence, particularly in patients with history of drug or alcohol addiction; withdraw gradually after prolonged use at high dosage.

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Side effects: Although there has been no evidence of tolerance, withdrawal symptoms or excessive self-medication, 'Soma' Compound and 'Soma' Compound with Codeine, like other central nervous system depressants, should be used with caution in addiction-prone individuals. While codeine addiction is relatively rare and easily broken, the same precautions must be observed as for any other opium alkaloid. Nausea, vomiting, constipation and miosis are possible codeine side effects. Should symptoms of hypersensitivity occur, discontinue medication.

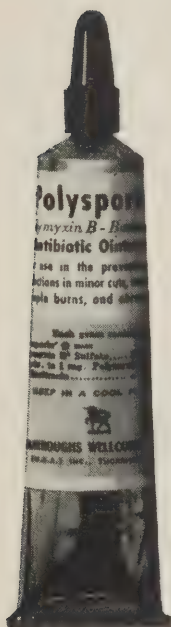
Contraindications: None reported.

Complete product information available in the product package, and to physicians upon request.

Dosage: Usual dosage is 1 or 2 tablets 4 times daily.

Supplied: 'Soma' Compound is available in orange, scored tablets; bottles of 50. 'Soma' Compound with Codeine (narcotic order form required) is available in white, lozenge-shaped tablets; bottles of 50.

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Contraindications: Valium (diazepam) is contraindicated in infants, patients with a history of convulsive disorders or patients with a history of glaucoma.

Warning: Valium (diazepam) is not of value in dealing with psychotic patients manifesting anxiety and should be avoided when there is reason to believe the patient is psychotic.

Precautions: In elderly or debilitated patients, it is important to limit the dosage to the smallest effective amount to preclude the development of ataxia or oversedation (not more than 1 mg, 1 or 2 times daily initially, to be increased gradually as needed and tolerated). As is true of all CNS-acting drugs, until the correct maintenance dosage is established, patients receiving Valium (diazepam) should be advised against possibly hazardous procedures requiring complete mental alertness or physical coordination. Driving an automobile during the period of Valium (diazepam) therapy is not recommended. In general, the concurrent administration of Valium (diazepam) and other psychotropic agents is not recommended. If such combination therapy is used, careful consideration should be given to the pharmacology of the agents to be employed with Valium (diazepam)—particularly with known compounds which may potentiate the action of Valium (diazepam), such as phenothiazines, barbiturates, MAO inhibitors and other antidepressants.

Since Valium (diazepam) has a central nervous system depressant effect, patients should be advised against the simultaneous ingestion of alcohol and other central nervous system depressant drugs during Valium (diazepam) therapy. Safe use of Valium (diazepam) during pregnancy has not been established. The usual precautions are indicated when Valium (diazepam) is used in the treatment of anxiety states where there is any evidence of impending depression; particularly the recognition that suicidal tendencies may be present and protective measures may be necessary. The usual precautions in treating patients with impaired renal or hepatic function should be observed.

Side effects: In clinical use, fatigue, drowsiness and ataxia have been reported; in most instances these are dose-related and may be avoided by proper dosage adjustment. Mild nausea and dizziness may occur on occasion. As with any new agent, when it is administered for protracted periods of time, periodic blood counts and liver function tests are advisable. Abrupt cessation after prolonged overdosage may, in some patients, produce withdrawal symptoms (e.g., convulsions, tremor, abdominal and muscle cramps, vomiting, sweating) similar to those seen with barbiturates, meprobamate and Librium® (chlordiazepoxide HCl). Changes in EEG patterns have been observed in patients during and after Valium (diazepam) treatment.

Paradoxical reactions, such as excitement, depression, stimulation, sleep disturbances, acute hyperexcited states and hallucinations have been reported. Other side effects noted have been blurred vision, diplopia, headache, incontinence, slurred speech, tremor and skin rash.

How supplied: For oral administration: Valium (diazepam) scored tablets, 2 mg, white, bottles of 50 and 500; 5 mg, yellow, bottles of 50 and 500.

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